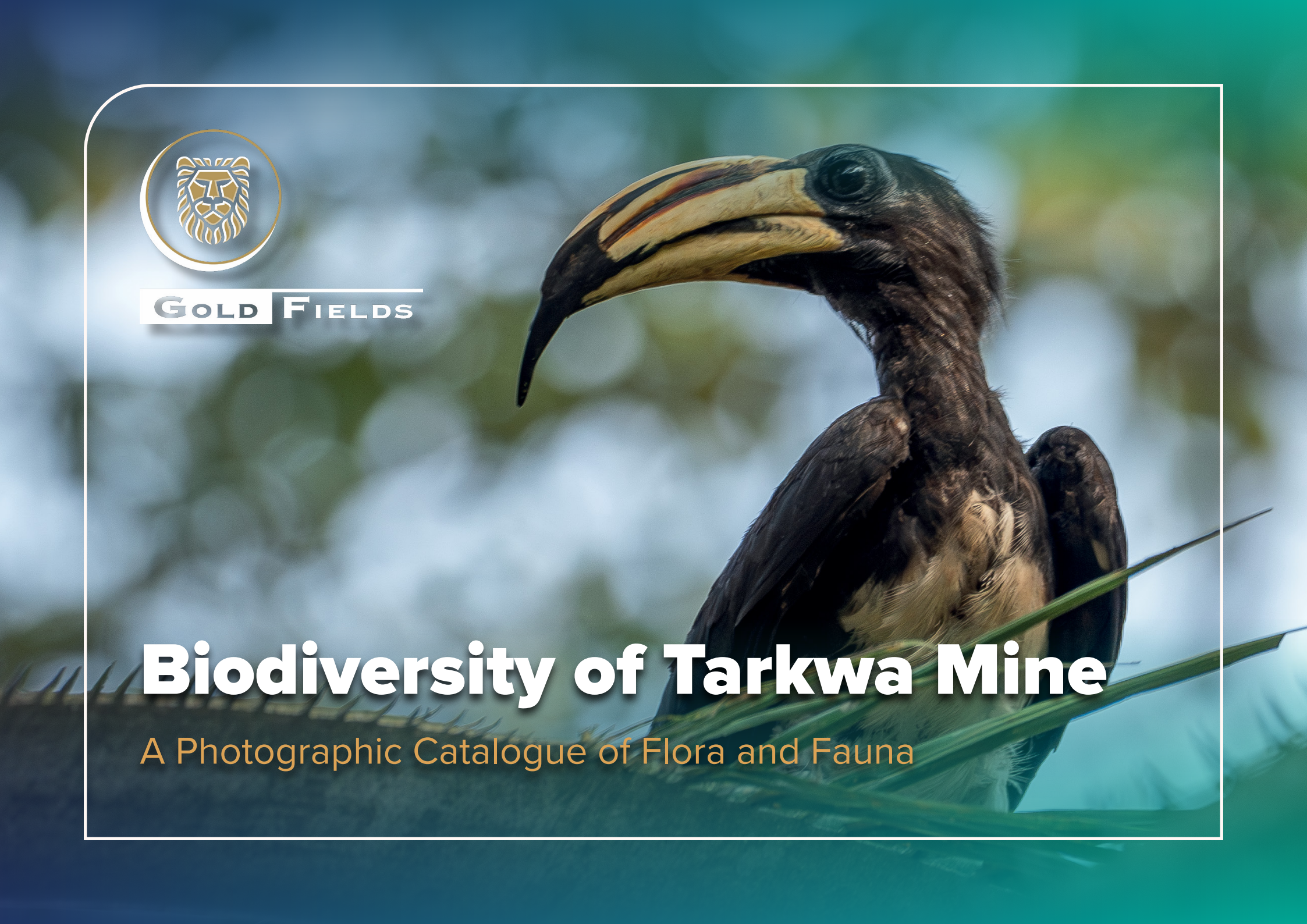

Biodiversity of Tarkwa Mine

A Photographic Catalogue of Flora and Fauna

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FOREWORD

JOHN KWASI ADINGELAH

PREPARED BY

TRAFFIC AND ENVIRONMENTAL NETWORK LTD.

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All photographs featured in this catalogue were taken by members of the survey team and external contributors.

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Raphael Nii Laate Lartey

The cover photograph was taken by Dr. Kofi Amponsah-Mensah, capturing the beauty of the African Pied Hornbill in the Tarkwa Mine concession.

How to Use This Catalogue

This photographic catalogue serves as a visual and scientific reference for the biodiversity documented within Gold Fields' Tarkwa concession. It highlights the avian, plant, mammal, and butterfly species recorded during the biological survey, providing key information on their identification, conservation status, and ecological significance.

Structure of the Catalogue

Each species entry includes:

- **Common and Scientific Names:** The species' widely known name and its scientific classification.
- **Photograph:** A high-quality image captured during the survey.
- **Description:** Key identifying features, habitat preference, and ecological role.
- **Conservation Status:** The species' classification based on IUCN Red List categories and the STAR ratings.
- **Habitat and Behaviour Icons:** Quick visual indicators of where the species is commonly found and notable behaviours.

Habitat and Behaviour Icons

Below is visual key to help readers interpret the habitat and behaviour symbols associated with each species.

- Diurnal Periods
- Crepuscular Periods
- Nocturnal Periods
- Forest Areas
- Thicket Areas
- Grassland Areas
- Human Settlement Areas
- Wetland Areas

IUCN Red List Categories & Star Rating Icons

Each species is classified based on its conservation status following the IUCN Red List criteria. Additionally, a star rating system is used to indicate species' ecological importance and rarity.

Table of Contents

Foreword

It is with great pride that Gold Fields Ghana presents this comprehensive photographic catalogue documenting the rich biodiversity within our Tarkwa Mine concession. This publication represents a significant milestone in our ongoing commitment to responsible mining practices and environmental stewardship.

Mining operations and biodiversity conservation have traditionally been viewed as opposing forces. At Gold Fields Ghana, we challenge this perspective by demonstrating that with proper management and genuine commitment, mining activities can coexist with diverse ecosystems. This catalogue stands as testimony to that possibility.

The extensive survey that formed the basis of this catalogue was conducted with meticulous attention to detail, capturing the remarkable variety of plant and animal life that continues to thrive within and around our operational areas. From endangered plant species like *Pericopsis elata* to the increasing populations of mammals that benefit from our “No Hunting Policy”, the biodiversity documented here reflects both the natural resilience of these ecosystems and the effectiveness of our conservation measures.

This catalogue serves multiple purposes. First, it provides a baseline inventory of existing biodiversity, creating a valuable reference point for monitoring ecological changes over time. Second, it serves as an educational resource for our employees, surrounding communities, and stakeholders, fostering appreciation for the natural heritage we are privileged to steward. Finally, it guides our operational decision-making, ensuring that biodiversity considerations are integrated into our mining activities.

The photographs and information contained in these pages reveal not just the biological richness of the area but also the intricate connections between species and their habitats. Each plant, bird, mammal, and butterfly documented here plays a vital role in maintaining the health and functionality of the overall ecosystem. By recognising these interconnections, we strengthen our approach to environmental management.

Gold Fields Ghana acknowledges that effective biodiversity conservation requires ongoing vigilance and adaptation. This catalogue is not the conclusion of our biodiversity work but rather a foundation upon which we will continue to build. Regular monitoring, additional research, and refinement of our conservation strategies will ensure that the species documented here continue to thrive for generations to come.

We extend our sincere gratitude to the dedicated team of biologists, ecologists, and environmental specialists who conducted the surveys and compiled this catalogue. Their expertise and commitment have made this important work possible. We also acknowledge the support and cooperation of local communities, regulatory authorities, and conservation partners who share our vision for responsible resource development.

As you explore the pages that follow, we invite you to appreciate the remarkable diversity of life that coexists with our mining operations. Each photograph represents not just a species, but a story of adaptation, resilience, and conservation success.

John Kwasi Adingelah
Senior Manager Environment & Laboratories

Acknowledgements

This Biodiversity Catalogue of Tarkwa Mine stands as the culmination of dedicated efforts from numerous individuals and organizations whose contributions were instrumental in its creation. We wish to express our profound gratitude to all who made this work possible.

First and foremost, we extend our sincere appreciation to the management of Gold Fields Ghana for their visionary leadership in prioritising biodiversity conservation alongside mining operations. Their unwavering commitment to environmental stewardship provided the foundation and resources necessary for this comprehensive survey and documentation effort.

Our heartfelt thanks go to the field research team whose expertise, patience, and persistence were essential in identifying and documenting the diverse species presented in this catalogue. Their countless hours spent traversing the concession area in varying weather conditions and terrains have yielded the valuable data and striking photographs that form the core of this publication.

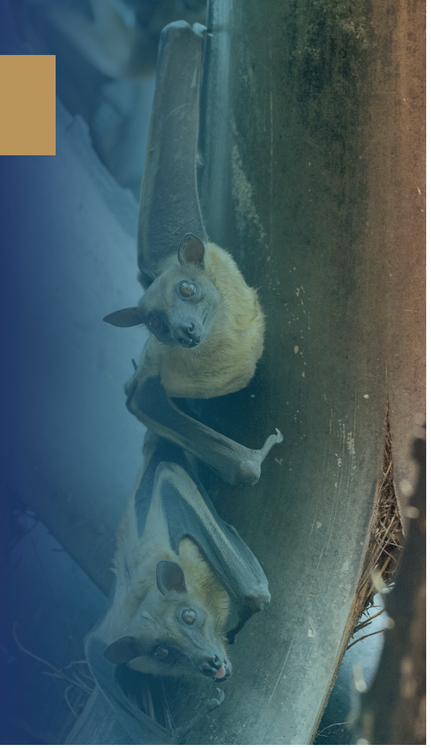
We acknowledge with gratitude the specialised contributions of:

- Our botanists, who meticulously identified the diverse plant species, including rare and endangered specimens.
- The ornithologists, whose keen eyes and ears detected the 140 bird species recorded in the concession.
- The mammal specialists and camera trap technicians, whose strategic placements captured elusive wildlife.
- The entomologists, who documented the delicate butterfly species that indicate ecosystem health.

Special recognition is due to the local communities surrounding the Tarkwa Mine, particularly the traditional knowledge holders who shared invaluable insights regarding indigenous uses of plants and historical wildlife patterns. Their ancestral wisdom has enriched this catalogue immeasurably. We are indebted to the Ghana Wildlife Division, Forestry Commission, and Environmental Protection Agency for their regulatory guidance and collaborative spirit. Their support has been crucial in aligning this work with national conservation priorities and international best practices.

Finally, we acknowledge the broader scientific community whose research on Ghana's biodiversity provided the contextual framework for our findings. This catalogue represents not just documentation of biodiversity but a testament to what can be achieved when industry, science, community, and governance collaborate toward environmental conservation. It is our hope that this work will inspire similar initiatives across Ghana's mining sector and beyond.

To everyone who contributed to this project, whether named or unnamed: your efforts have created a lasting record of Ghana's natural heritage and a valuable tool for its protection.



General Introduction

An extensive mine-wide survey of fauna and flora was undertaken at Gold Fields' Tarkwa Mine. One of the key recommendations was to develop a catalogue of key flora and fauna species in simple language that could serve as educational material as well as a guide for management decisions in the operations at the mine, with regards to conservation of biodiversity.

This catalogue provides documentation of pictures taken from the field covering some important plant species, birds, mammals and insects that occur in the concession. The conservation status of each species has been highlighted.

In addition, the species check list for the four categories have been provided as appendices to show the diversity of flora and fauna that occur in the concession. It is important to note that not all the species in the list are represented in the pictures provided in the catalogue.

Plants

Introduction

Through extensive surveys a few dozen plant species were recorded. This section of the catalogue provides information on twenty species considered to be very important in terms of conservation value as well as traditional and medicinal use for which the management of Gold Fields must pay attention to.

Some of the species are *Pericopsis elata*, which is endangered and vulnerable timber species such as *Terminalia ivorensis*. *Terminalia superba*, *Heritiera utilis*. For example, remnant patches of natural forests on steep hills and slopes are preserved and managed to protect relic populations of indigenous/original species, including the endangered *Cola umbratilis*.

These remnant patches promote spontaneous succession of natural regeneration supplementary to re-vegetation efforts.

Annonaceae

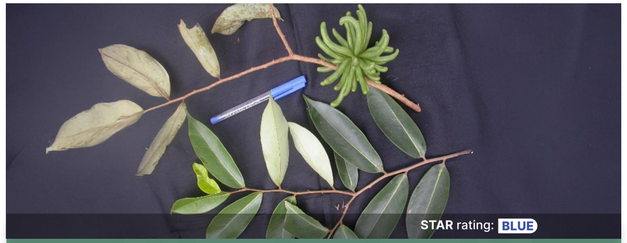
Hwentia

Description

An evergreen aromatic tree, widespread pioneer or cultivated species that can grow up to 20m. Leaves pale below, broadest at base. Flowers with three inner petals; fruits in heads of 20 -30, constricted between seeds. Seeds are popular spice sold in markets for their peppery medicinal properties.

LOCALITY: Widespread in the concession area especially in rehabilitated areas.
USES: Medicine, Spices etc.


Hwentia leaves


STAR rating: BLUE

Xylopia aethiopica
(Dunal) A. Rich.

LC Least Concern

Arecaceae

Eyie

Description

Rattan/Cane 25 – 50 metres long. Stems spiny, 2 – 2.5cm without sheath, 3 -3.5 cm with sheath; veins spiny. Leaves up to 40 pairs of leaflets, commonly 45 – 60° angle to sheath.

LOCALITY: TSF2 **USES:** Canes/Rattan Handicrafts, Furniture etc.


Eyie leaves


STAR rating: PINK

Laccosperma secundiflorum
(P. Beauv.) Kuntze

LC Least Concern

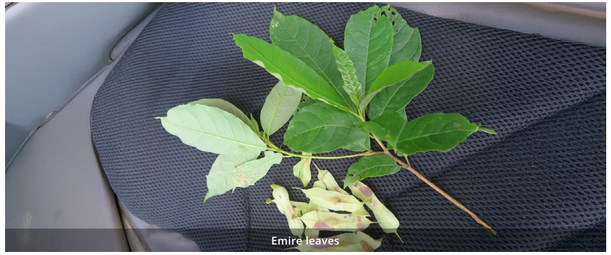
Combretaceae

Emire

Description

Deciduous tree up to 45m; straight with small but thick buttress. Branches in whorls/ horizontal, flat topped. Bark slightly fissured; slash bright yellow, fibrous. Leaves simple, alternate, clustered at thig ends. Fruits winged. Fast growing and self-pruning.

LOCALITY: Planted in rehabilitated areas around New Access Gate.
USES: General purpose timber, medicine etc.



Emire leaves

STAR rating: SCARLET

Terminalia ivorensis

A. Chev.

VU Vulnerable

Combretaceae

Ofram

Description

Deciduous tree up to 45m with straight cylindrical bole and steep high plank buttress. Branches whorled with foliage in layers. Bark pale and silvery with long scales. Slash thin, fibrous. Leaves simple, alternate, clustered. Fast growing and self-pruning.

LOCALITY: Planted in rehabilitated areas around New Access Gate.
USES: Timber

Ofram leaves

STAR rating: RED

Terminalia superba

Engl. & Diels

NT Near Threatened

Fabaceae

Kokrodua

Description

Timber tree previously common in dry and moist semi-deciduous forests of Ghana. It has spreading crown and relatively cylindrical bole with conspicuously reddish flaky patches. Buttresses low or absent. It produces one of the most valued timbers in tropical Africa. This species has suffered severe exploitation, particularly in the dry zone and should be targeted for provenance protection as well as ex-situ conservation.

LOCALITY: This specimen tree was planted in a rehabilitated Tailings storage facility in GFGL Damang mine.

Krokrodua leaves

CITES Appendix II

STAR rating: SCARLET

Pericopsis alata

(Harms) van Meeuwen

CR Critically Endangered

Fabaceae

Dahoma

Description

Large, emergent, valuable timber tree, up to 45m, wandering plank buttress, bark smooth, crown spreading with small feathery leaves. Pod flat, strap-like, ≤20 cm long, splitting along one margin. Seeds wind-dispersed.

LOCALITY: Remnant forest in TSF 2.

Dahoma leaves

STAR rating: RED

Piptadeniastrum africanum

(Hook.f.) Brenan

LC Least Concern

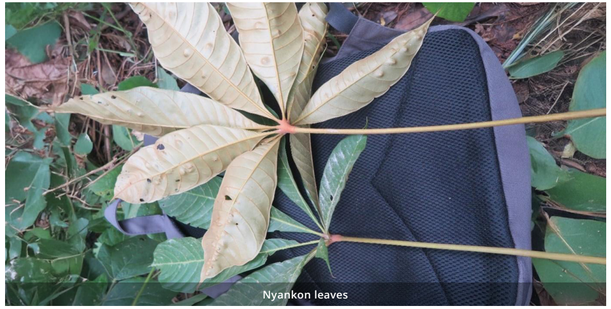
Malvaceae

Nyankon

Description

An over exploited timber tree of evergreen forest; up to 45m tall, often with stilt buttresses. Slash fibrous. Golden brown leaves, varied: simple in saplings and digitately compound in mature trees;.

LOCALITY: Remnant patch of forest at TSF2, TSF3; also at New Access gate (planted in 2011).



Nyankon leaves

STAR rating: SCARLET

Herietiera utilis

(Sprague) Sprague

LC Least Concern

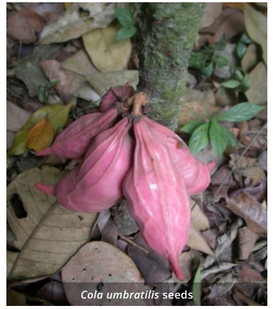
Malvaceae

Tananfre-bere

Description

Shade bearing small tree up to ≤5m tall flowering when ±2m; only in wet evergreen forest. Flowers clustered, mature fruits shiny, generally with prominent veins.

LOCALITY: Kottrevechy Forest; TSF 3



Cola umbratilis seeds

Cola umbratilis tree trunk and flower

STAR rating: BLACK STAR

Cola umbratilis

Brenam & Keay

VU Vulnerable

Menispermaceae

Nkraman-kote

Description

Treelet ≤ 1m tall in forest understorey. Leaves not lobed; very variable in shape and size, from narrowly elliptic a slender drip tip to abruptly acuminate. Fruits ovoid and ripens red.

LOCALITY: Under-story of remnant patches of natural forest

USES: Traditional medicine. Roots sold in herbal medicine shops in Ghana.

Nkraman-kote leaves

Penianthus zenkeri

(Engl.) Diels

STAR rating: **GREEN**

Menispermaceae

Nkraman-kote

Description

Treelet ≤ 1m tall in forest understorey. Leaves not lobed; very variable in shape and size, from narrowly elliptic a slender drip tip to abruptly acuminate. Fruits ovoid and ripens red.

LOCALITY: In remnant patches of natural forest.

USES: Treasured aphrodisiac. Roots sold in herbal medicine shops in Ghana.

Nkraman-kote seeds and twigs

IUCN: Not evaluated

Sphenocentrum jollyanum

Pierre

STAR rating: **GREEN**

Meliaceae

Dubini, African Mahogany

Description

Large tree, high buttressed with dark green crown. Fruits spherical; with wind-dispersed seeds. Slash deep red over paler red, scented, bitter. An over exploited timber tree in moist and evergreen forests.

LOCALITY: Precincts of Health and Environment department. Also planted in rehabilitated areas around New Access Gate.

Nyankon leaves

STAR rating: SCARLET

Khaya ivorensis

A. Chev.

VU Vulnerable

Moraceae

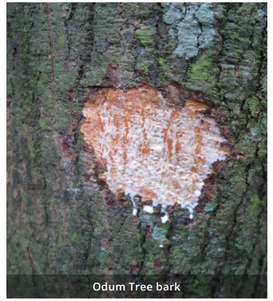
Odum, Iroko

Description

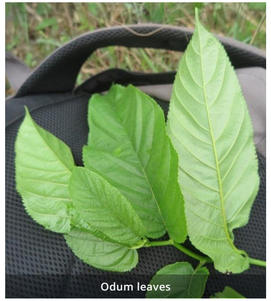
Tall deciduous tree with straight cylindrical bole; bark rough, slash very gritty with white latex. Sampling leaves serrated, adult leaves entire to rounded and slightly asymmetric at base with 6 – 11 pairs of lateral nerves.

LOCALITY: Precincts of AESL

USES: Timber



Odum Tree bark



Odum leaves

STAR rating: SCARLET

Milicia regia

(A. Chev) C.C. Berg

VU Vulnerable

Rubiaceae

Kusia

Description

Medium to large evergreen tree with cylindrical un-buttressed bole, slightly broader at base; crown rounded with horizontal branches. Slash thick, fibrous, orange brown. Fruits fleshy with pits all over the surface.

LOCALITY: Precincts of Environment, Health and Safety Department.
USES: Valuable timber and transmission poles.


Kusia leaves


Kusia leaves


STAR rating: SCARLET

Nauclea diderrichii
(De Wild. & T. Durand) Merrill

NT Near Threatened

Sapotaceae

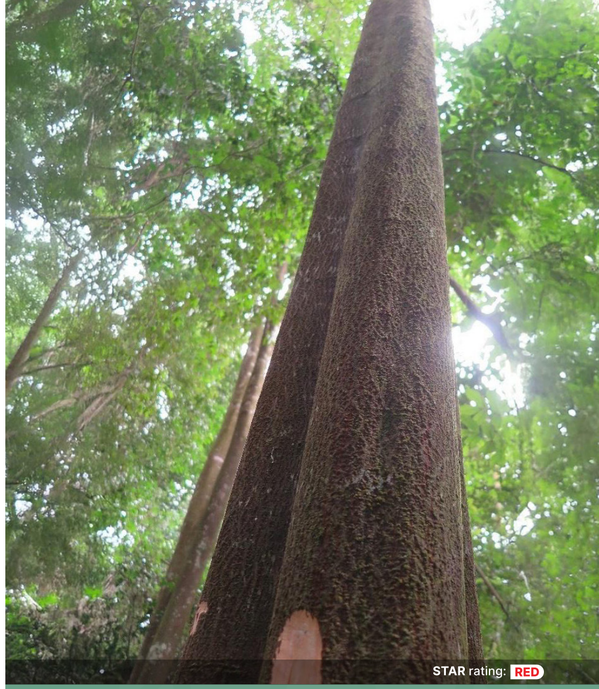
Duatadwe

Description

Evergreen tree with fluted bole. Slash with white or creamy exudate; dark outer layer. Fruits ovoid, pointed 2-3 cm long and ≤ 1.5cm.

LOCALITY: Precincts of AESL **USES:** Timber


Duatadwe seeds and leaves


STAR rating: RED

Chrysophyllum pruniforme
Pierre ex Engl.

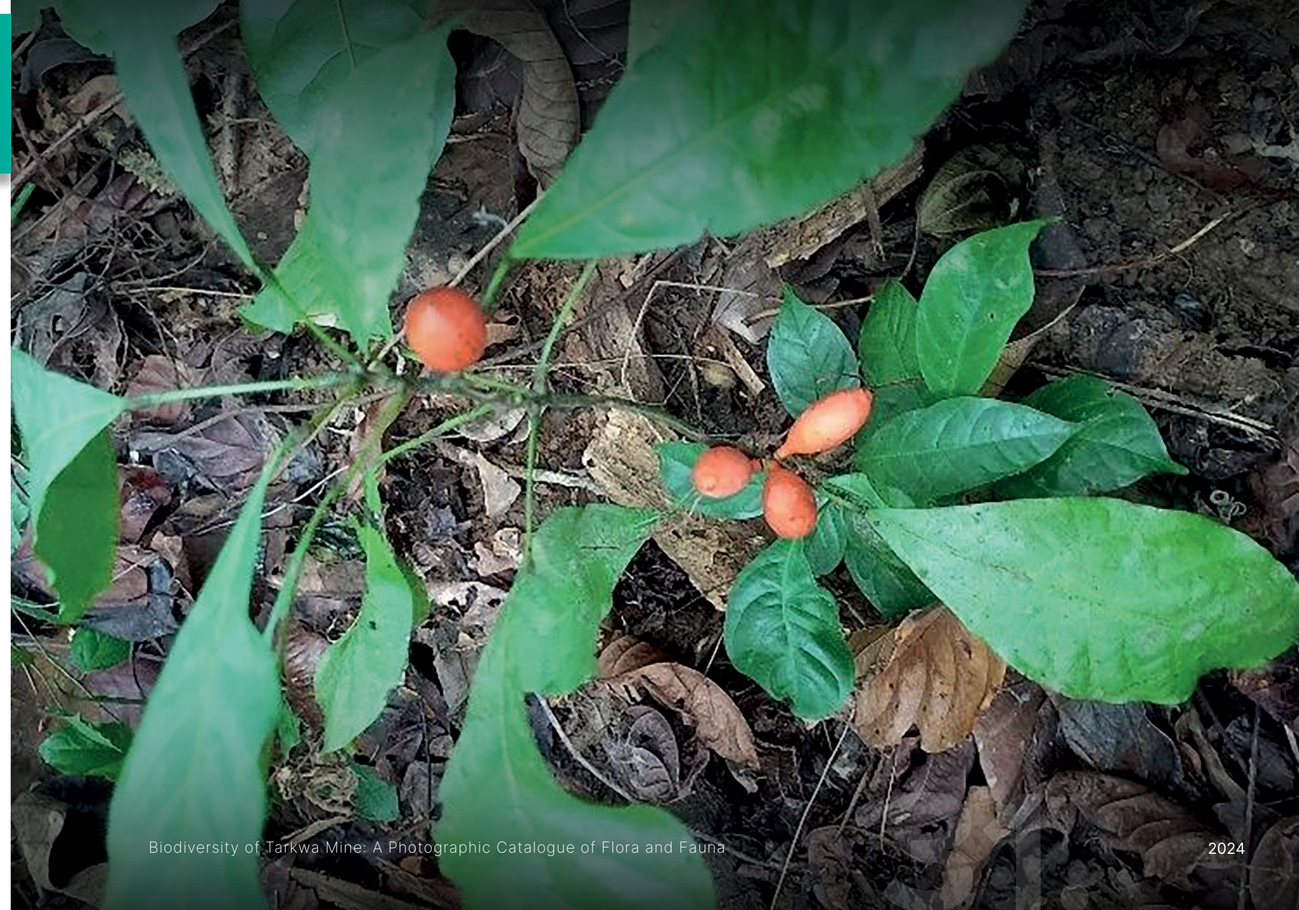
VU Vulnerable

CHECKLIST OF PLANT SPECIES

This checklist consists of all the species of conservation concern recorded at the Tarkwa Mine and presents species in no particular taxonomic sequence.

Species Name	Conservation Status		Threat
	STAR Rating	IUCN Red List	
Cola umbratilis	Black	Vulnerable	Habitat Loss
Placodiscus bancoensis	Black	Vulnerable	Habitat Loss
Placodiscus pseudostipularis	Gold	Endangered	Habitat Loss
Diospyros chevalieri	Gold	Least Concern	Habitat Loss
Uapaca paludosa	Gold	Least Concern	Habitat Loss
Combretum tarquense	Gold	Not Assessed	Habitat Loss
Millettia lucens	Gold	Not Assessed	Habitat Loss
Delpidora gracilis	Gold	Not Assessed	Habitat Loss
Anisophyllea meniaudii	Gold	Not Assessed	Habitat Loss
Milicia excelsa	Scarlet	Near Threatened	Over-exploitation
Heritiera utilis	Scarlet	Vulnerable	Over-exploitation
Nauclea diderrichii	Scarlet	Near Threatened	Over-exploitation
Lophira alata	Scarlet	Vulnerable	Over-exploitation

Notes to 'STAR' rating: **BLACK** = Rare globally; **GOLD** = Fairly rare globally; **SCARLET** = Under pressure from over-exploited



Birds

Introduction

As a significant component of terrestrial fauna, birds constitute a key component of terrestrial biodiversity assessment. They are generally conspicuous and relatively easy to identify and assess in the field.

Results of ornithological studies in variety of ecosystems have showed that birds are reliable indicators of terrestrial biological richness and environmental conditions (Stattersfield, et al. 1998). Hence the importance Gold Fields Ghana attaches to regular monitoring of bird species in its concession.

Through extensive surveys 140 bird species have been recorded at the Tarkwa Mine. However, this catalogue provides pictures of over eighty species. The rest of the species whose picture could not be taken are provided in the appendix as checklist.

Accipitridae

Hawks, Eagles, Kites
Palm-nut Vulture

Found across various habitats including forests, thickets, and human settlements, active during daylight


Yellow-billed Kite

Description

Powerful diurnal raptors with sharp, hooked beaks, strong talons, and exceptional binocular vision capable of detecting prey from great heights. They display distinct flight silhouettes with broad, often fingered wings and varied tail shapes used for steering.

These birds exhibit diverse hunting strategies from soaring to perch-hunting, and show plumage variations from dark brown to mottled patterns, with distinctive head markings.

Yellow to brown eyes, substantial size variation (small kites to large eagles), and remarkable sexual dimorphism are common, with females typically larger than males. Juveniles display markedly different plumage from adults.


Palm-nut Vulture


Yellow-billed Kite


Lizard Buzzard LC Least Concern
Kaupifalco monogrammicus


Cassin's Hawk Eagle LC Least Concern
Aquila africana


African Cuckoo Hawk LC Least Concern
Aviceda cuculoides


Yellow-billed Kite LC Least Concern
Milvus aegyptius


Palm-nut Vulture LC Least Concern
Gypohierax angolensis


African Cuckoo Hawk (Juvenile)

Alcedinidae

Kingfishers

Primarily associated with water bodies in forest and thicket areas, all diurnal

Yellow-billed Kite

Description

Compact, brilliantly-coloured birds with disproportionately large heads, strong, dagger-like bills, and short legs. They possess stocky bodies with vibrant plumage that ranges from metallic blue to emerald-green above, often contrasting with rufous, white, or chestnut underparts. These distinctive birds have forward-facing eyes providing excellent binocular vision, specialized neck vertebrae for high-impact fishing, and typically perch motionless before diving dramatically for prey. Their characteristic loud, rattling calls often announce their presence before they're seen. Many species display sexual dimorphism in bill coloration or plumage patterns.

African Pygmy Kingfisher LC Least Concern
Ispidina picta

Blue-breasted Kingfisher LC Least Concern
Halcyon malimbica

Woodland Kingfisher LC Least Concern
Halcyon senegalensis

Anatidae

Ducks

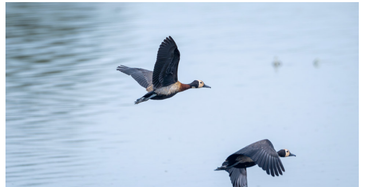
Primarily associated with wetlands and nearby grasslands, active during daylight and crepuscular periods

White-faced Whistling Duck LC Least Concern
Dendrocygna viduata

Description

Primarily aquatic birds with specialized broad, flattened bills containing filtering lamellae, webbed feet for efficient swimming, and water-resistant plumage. Their bodies are typically streamlined with relatively short legs set far back, facilitating swimming. These birds display remarkable sexual dimorphism, with males often exhibiting vibrant breeding plumage while females show cryptic coloration. Most species undergo complete annual moult, temporarily becoming flightless. They produce diverse vocalizations from loud honking to soft whistles, varying significantly between species.

White-faced Whistling Duck



White-faced Whistling Duck

White-faced Whistling Duck

Anhingidae

Darters

Exclusively associated with freshwater bodies, active during daylight

Description

Distinctive water-birds with slender, elongated necks, small heads, and straight, pointed dagger-like bills used for spearing fish. These birds possess remarkably sinuous necks that can dart forward with lightning speed while hunting. Their wings are long and broad for soaring, while their tails are elongated and fan-shaped. Anhingids swim with only their necks visible above water, creating a snake-like appearance.

They lack waterproofing oils, requiring distinctive wing-spreading posture for drying. Adults display sexual dimorphism, with males showing glossy black plumage with silver wing patterns and females exhibiting buff-coloured heads and necks.

African Darter
Anhinga rufa
LC Least Concern

Ardeidae

Egrets & Herons

Primarily associated with wetlands and shallow water bodies, active during daylight with some crepuscular species

Western Reef Heron

Description

Elegant wading birds with long, S-shaped necks that can be extended dramatically when hunting or compressed in flight, giving them distinctive silhouettes. They possess slender, sharp bills adapted for spearing fish and other prey, long legs for wading, and broad wings for powerful yet graceful flight. These birds exhibit diverse hunting strategies from patient standing to active pursuit. Many species display elaborate plumage during breeding season, including ornamental aigrettes. Their coloration ranges from brilliant white to cryptic browns and greys, often with contrasting markings on head, breast, or wings. Most species display colonial nesting behaviour.

Western Reef Heron
Egretta gularis
LC Least Concern

Cattle Egret
Bubulcus ibis
LC Least Concern

Cattle Egret

Bucerotidae

Hornbills

Primarily associated with forests and woodlands, active during daylight

Description

Distinctive large-bodied birds with disproportionately large, often colourful, downward-curved bills, many topped with prominent casques that vary dramatically between species.

They possess unique eyelashes (modified feathers), strong neck muscles supporting their substantial bills, and characteristically loud, far-carrying calls. These birds exhibit remarkable breeding behaviour, with females sealed into tree cavities during nesting.

Their wing beats produce distinctive whooshing sounds during flight. Most species display sexual dimorphism in bill coloration, casque size, and plumage patterns. Many have bare facial skin in vibrant hues of yellow, red, or blue.

West African Pied Hornbill
Lophoceros semifasciatus

LC Least Concern

Burhinidae

Thick-knees & Curlews

Primarily associated with open grassy areas and thickets, active during night and crepuscular periods

Description

Cryptically coloured ground birds with distinctively large, yellow eyes adapted for nocturnal activity and disproportionately thick knee joints that give the family its common name.

They possess strong, slightly downward-curved bills for capturing invertebrates, camouflaged plumage in browns and buffs with intricate streaking patterns, and relatively long legs suited for running.

These birds are remarkable for their freeze-in-place defensive behaviour when threatened. Their haunting, far-carrying calls are distinctive features of African nightscapes. Despite being primarily terrestrial, they're capable fliers and can be surprisingly elusive despite their size.

Senegal Thick-knee
Burhinus senegalensis

LC Least Concern

Cisticolidae

Cisticolas, Apalis, Prinias

Primarily associated with grassy areas, reed beds, and low thickets, active during daylight

Grey-backed Camaroptera
Camaroptera brevicaudata
LC Least Concern

Description

Small, active warblers with short, rounded wings, graduated tail feathers, and fine, slightly curved bills adapted for gleaning insects. These birds display notably cryptic plumage that varies seasonally, with breeding males often developing more vibrant colours or distinctive patterns. Despite their diminutive size, they produce remarkably loud, distinctive calls often used for identification.

Many species perform elaborate display flights, ascending vertically before descending with characteristic vocalizations. Their remarkable nest-building skills range from intricate woven structures to leaf-sewing techniques using spider silk. Most species exhibit territorial behaviour with characteristic perching postures.

Short-winged Cisticola
Cisticola brachypterus
LC Least Concern

Whistling Cisticola
Cisticola lateralis
LC Least Concern

Coraciidae

Rollers

Primarily associated with woodlands and forest edges, active during daylight

Broad-billed Roller
Eurystomus glaucurus
LC Least Concern

Description

Medium-sized, strikingly coloured birds with robust bodies, large heads, and strong, slightly hooked bills. They possess remarkable aerial agility, performing spectacular rolling courtship flights that give the family its name.

Their plumage showcases brilliant blues and chestnut tones, often with contrasting throat or wing patterns. These birds have forward-set eyes providing excellent binocular vision for hunting, and strong legs for perching.

They emit harsh, raucous calls that carry considerable distances. Most species display elaborate fanning of tail feathers during displays and have distinctive black eye-masks enhancing their dramatic appearance.

Blue-throated Roller
Eurystomus gularis
LC Least Concern

Columbidae

Doves & Pigeons

Found across various habitats including forests, thickets, and human settlements, active during daylight

African Green Pigeon
Treron calvus

LC Least Concern

Description

Compact-bodied birds with small heads, short necks (which can be extended), and slender bills with distinctive fleshy ceres at the base. They possess dense, soft plumage that produces a characteristic wing-whistle during flight, and their heads often show iridescent patches that catch sunlight. These birds are unique among avians for producing crop “milk” to feed their young, and for drinking by suction rather than scooping. Their soft, rhythmic cooing vocalizations are instantly recognizable. Remarkable navigational abilities allow precise homing over long distances. Most exhibit minimal sexual dimorphism, with subtle differences in iridescence or neck patterns.

Red-eyed Dove
Streptopelia semitorquata
LC Least Concern

Tambourine Dove
Turtur tympanistria
LC Least Concern

Blue-spotted Wood Dove
Turtur afer
LC Least Concern

Corvidae

Crows

Found across various habitats including forests, thickets, and human settlements, active during daylight

Pied Crow
Corvus albus

LC Least Concern

Description

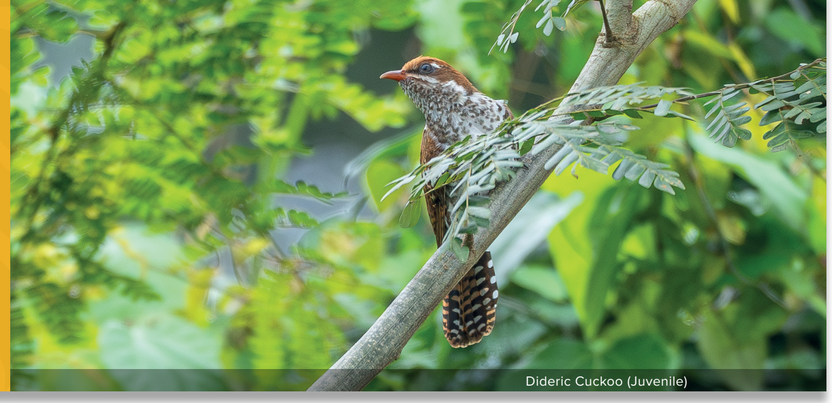
Large, intelligent birds with sturdy bills, prominent throat hackles, and relatively large brains exhibiting remarkable problem-solving abilities and tool use. They possess versatile, omnivorous diets facilitated by strong, multi-purpose bills. These birds display complex social structures with sophisticated communication systems using varied vocalizations and body language.

Their predominantly black plumage often shows iridescent sheens in sunlight, with some species featuring dramatic white or grey patterns. These long-lived birds maintain pair bonds for multiple seasons and demonstrate extraordinary memory capacity, particularly for food caching. Their gait alternates between walking and hopping depending on terrain.

Cuculidae

Cukcoos, Malkohas
Coucals

Primarily found in forests and thickets, active during daylight


Dideric Cuckoo (Juvenile)

Description

Slender-bodied birds with graduated tails, zygodactyl feet (two toes forward, two backward), and slightly down-curved bills. Many species exhibit remarkable brood parasitism, laying eggs mimicking host species' eggs. These birds often possess cryptic plumage resembling hawks or mimicking aggressive species, providing protection through deception. Their distinctive, far-carrying calls frequently incorporate regular rhythmic patterns and are used for species identification. Flight patterns are typically direct with rapid wing beats. Some species demonstrate remarkable annual migrations covering thousands of kilometres. Many display distinctive white spots on tail feathers visible during display flights or alarm responses.


Dideric Cuckoo (Juvenile)


Klaas's Cuckoo (Female)


Blue Malkoha

Senegal Coucal LC Least Concern
Centropus senegalensis

Dideric Cuckoo LC Least Concern
Chrysococcyx caprius

Blue Malkoha LC Least Concern
Ceuthmochares aereus

Klaas's Cuckoo LC Least Concern
Chrysococcyx klaas

Estrildidae

Mannikins, Fire Finches
Waxbill

Primarily found in grassy areas and thickets, active during daylight

Description

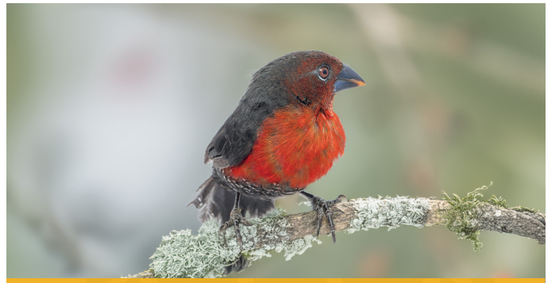
Tiny, finch-like birds with conical, seed-crushing bills, rounded wings, and frequently raised tails displaying distinctive patterns. They possess soft, subtle plumage often featuring delicate barring or spotting, with many species showing bright patches of red, yellow, or blue, particularly around the face or rump. These birds are remarkable for their elaborate courtship displays involving rhythmic bouncing while carrying nesting material.

Many species build complex, covered nests with entrance tunnels. Their high-pitched, tinkling calls create continuous contact within flocks. Most exhibit mutual preening behavior strengthening pair bonds and showing subtle sexual dimorphism.

Bronze Mannikin
Spermestes cucullata
LC Least Concern

Orange-cheeked Waxbill
Estrilda melpoda
LC Least Concern

Black-and-white Mannikin
Spermestes bicolor
LC Least Concern



Western Bluebill
Spermophaga haematina
LC Least Concern

Chestnut-breasted Nigrita
Nigrita bicolor
LC Least Concern

Fringillidae

True Finches

Found across woodlands, thickets, and grassy areas, active during daylight

Description

Compact birds with conical, powerful seed-crushing bills, notched tails, and relatively pointed wings enabling undulating flight patterns. They possess distinctive raised crown feathers that can be erected for display, and many species show dramatic sexual dimorphism with males displaying bright yellows, reds, or oranges during breeding season. These birds are remarkable for their complex, often melodious songs incorporating mimicry.

Their feet are specially adapted for perching on thin stems while feeding. Many species undergo seasonal plumage changes, with brightest colours during breeding season. Flocking behaviour often involves coordinated, synchronous movements particularly when alarmed.

Yellow-fronted Canary
Crithagra mozambica

LC Least Concern

Jacanidae

Jacana

Exclusively found on wetlands with floating vegetation, active during daylight

Description

Distinctive wading birds with remarkably elongated toes and claws that distribute weight, enabling their signature walking on floating vegetation. They possess bright frontal shields and wattles in vibrant colours that contrast dramatically with their bodies. These birds exhibit polyandrous breeding systems where females maintain territories with multiple males.

Their wings show prominent spurs used in territorial defence. Their body posture is distinctive, with head held high while walking, and they perform elaborate splayed-leg territorial displays. Flight appears weak and fluttering, yet they're capable of long-distance movements. Chicks possess remarkably precocial development, capable of swimming shortly after hatching.

African Jacana
Actophilornis africanus

LC Least Concern

Lybiidae

African Barbets and Thinkerbids

Primarily found in forests and woodlands, active during daylight


Vieillot's Barbet

Description

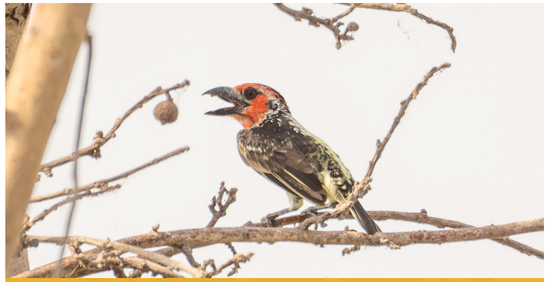
Stocky, large-headed birds with thick, serrated bills adorned with prominent rictal bristles used for fruit manipulation. They possess vibrant plumage featuring dramatic contrasts between black, white, yellow, and red, particularly on the face and throat. These birds have strong, zygodactyl feet (two toes pointing forward, two backward) adapted for clinging to tree trunks. They produce distinctive, repetitive mechanical-sounding calls, often delivered in duets between paired birds. Remarkable for excavating nest cavities in dead trees, they create perfect circular entrances. Many species display bare skin patches that become more vibrant during breeding displays.


Naked-faced Barbet


Speckled Tinkerbird


Vieillot's Barbet


Speckled Tinkerbird



Vieillot's Barbet LC Least Concern
Lybius vieilloti

Speckled Tinkerbird LC Least Concern
Pogoniulus scolopaceus

Naked-faced Barbet LC Least Concern
Gymnobucco calvus

Macrosphenidae

African Warblers

Found in thickets and forest understory, active during daylight

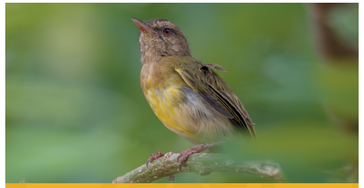
Tawny-flanked Prinia

Description

Small, active insectivorous birds with slender bills, graduated tails, and subdued olive-brown to grey plumage that provides excellent camouflage. They possess remarkably strong legs for their size, enabling them to cling to vertical stems while foraging. These birds are distinguished by their extraordinary vocal abilities, producing complex songs despite their diminutive size. Their secretive behaviour often includes rapid movement through dense vegetation with brief appearances. Most species show minimal sexual dimorphism, being distinguished primarily by behaviour and song. They're remarkable for constructing well-hidden domed nests with side entrances, typically placed low in vegetation.

Tawny-flanked Prinia LC Least Concern
Prinia subflava

Kemp's Longbill LC Least Concern
Macrosphenus kempi



Green Crombec LC Least Concern
Sylvietta virens

Malaconotidae

Bushsrikes

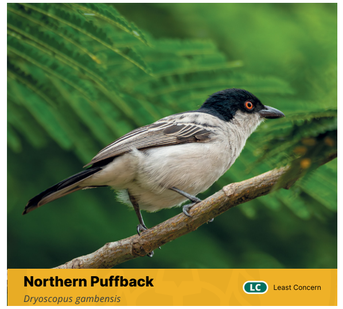
Found across various habitats including forests, dense thickets, active during daylight

Black-crowned Tchagra LC Least Concern
Tchagra senegalus

Description

Medium-sized birds with powerful, hooked bills, strong legs, and vibrant plumage often featuring dramatic contrasts between black, white, and brilliant reds, yellows, or oranges. They possess extraordinary vocal abilities, including remarkable mimicry and ventriloquism, with many species performing coordinated duets between mated pairs. These birds exhibit secretive behaviour despite their colourful appearance, moving deliberately through dense foliage.

Their distinctive eyes range from deep crimson to pale yellow, contrasting dramatically with surrounding plumage. Many species display sexual dimorphism, with males showing more intense coloration. Their foraging behaviour includes systematic probing of bark crevices and leaf clusters.



Northern Puffback LC Least Concern
Dryoscopus gambensis

Northern Puffback (Male)

Meropidae

Bee-Eaters

Found across woodlands and forest edges, active during daylight

White-throated Bee-eater
Merops albicollis
LC Least Concern

Description

Slender, vividly coloured birds with elongated central tail feathers, slightly down-curved bills, and pointed wings enabling exceptional aerial agility. They possess remarkable specialized throat feathers that compress to protect against insect stings, and distinctive dark eye-masks contrasting with brilliant throat coloration. These birds exhibit characteristic perching behaviour with upright posture, frequently sallying forth to capture flying insects.

Their flight is buoyant and graceful, often incorporating dramatic circular manoeuvres. They produce melodious, liquid calls that carry across open spaces. Most species display elaborate courtship feeding rituals and complex social behaviours including cooperative breeding.

Little Bee-eater
Merops pusillus
LC Least Concern

Little Bee-eater

Motacillidae

Wagtails, Longclaws
Pipits

Found in open grassy areas and wetland edges, active during daylight

African Pied Wagtail
Motacilla aguimp
LC Least Concern

Description

Slender ground-dwelling birds with elongated bodies, long legs, and distinctive constantly-bobbing tail movements that give the family its name. They possess remarkably long hind claws, particularly in pipits, adapted for walking on soft ground.

Their flight pattern is distinctive, consisting of deep undulations with wings closed briefly between wing beats. These birds exhibit complex seasonal plumage variations, with breeding males displaying more vibrant patterns.

Their vocalizations are typically high-pitched and delivered during characteristic flight displays. Most species show remarkable walking ability rather than hopping, with an elegant, deliberate gait while foraging.

Plain-backed Pipit
Anthus leucophrys
LC Least Concern

Musophagidae

Turacos, Plantain-eaters

Exclusively forest-dwelling, active during daylight

Description

Strikingly colourful birds with distinctive crests, rounded wings, and long tails carried horizontally. They possess unique crimson wing feathers containing turacin, a copper-based pigment that maintains colour even when wet. These birds have semi-zygodactyl feet (outer toe reversible) enabling remarkable climbing ability through forest canopies.

Their calls are loud, distinctive honking or cooing sounds that carry long distances through forests. Most species display brilliant green plumage produced by unique light refraction rather than pigmentation. Their characteristic heavy, bounding flight between trees is punctuated by glides. Most show minimal sexual dimorphism, with pairs maintaining year-round territories.

Western Plantain-eater
Crinifer piscator

LC Least Concern

Nicatoridae

Nicators

Found in forests and dense thickets, active during daylight

Western Nicator
Nicator chloris

LC Least Concern

Description

Medium-sized, robust birds with strong bills, distinctive yellow eye-ring, and conspicuous white patches on wings visible during display. They possess extraordinary vocal abilities, producing loud, varied calls incorporating whistles, chatters, and mimicry.

These birds exhibit secretive behaviour despite their distinctive vocalizations, keeping to dense vegetation. Their plumage combines olive-green upper parts with distinctive yellow wing-linings flash visible during flight.

They demonstrate remarkable consistency in call patterns, used for territory maintenance. Foraging behaviour includes methodical searching of foliage, particularly on undersides of leaves. Despite their size, they move with surprising agility through thick vegetation.

Western Nicator

Western Nicator

Nectariniidae

Sunbirds

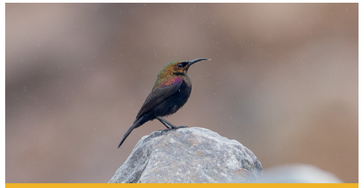
Found across forests, thickets, and flowering areas, active during daylight

Olive-bellied Sunbird
Cinnyris chloropygius
LC Least Concern

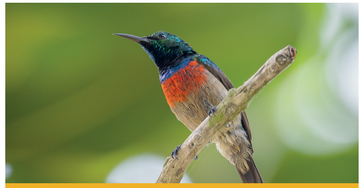
Description

Tiny, vividly iridescent birds with distinctively downward-curved bills adapted for nectar feeding, and brush-tipped tongues for efficient nectar collection. Males possess extraordinarily brilliant, metallic plumage that shifts colours with viewing angle, while females typically show more subdued olive-yellow coloration. These birds hover briefly when feeding, though less sustained than hummingbirds. Their high-pitched, tinkling calls often accompany conspicuous display flights. Most species construct elaborate pendant nests with overhanging porches, meticulously woven from plant fibres. Their rapid metabolism requires constant feeding, with remarkable site fidelity to productive flowering plants.

Collared Sunbird
Hedydipna collaris
LC Least Concern



Copper Sunbird
Cinnyris cupreus
LC Least Concern



Tiny Sunbird
Cinnyris minullus
LC Least Concern

Olive Sunbird
Cyanomitra olivacea
LC Least Concern

Reichenbach's Sunbird
Anabathmis reichenbachii
LC Least Concern

Green-headed Sunbird
Cyanomitra verticalis
LC Least Concern

Splendid Sunbird
Cinnyris coccinigastrus
LC Least Concern

Passeridae

Sparrows

Highly adapted to human settlements, thickets, and grassy areas, active during daylight

Northern Grey-headed Sparrow
Passer griseus
LC Least Concern

Description

Compact, sturdy birds with conical bills adapted for seed-crushing, rounded wings for quick bursts of flight, and distinctive cheek patches (particularly in males). They possess remarkable adaptability to human environments, demonstrating complex problem-solving abilities. These birds exhibit distinctive bathing behaviours, including dust-bathing when water is scarce.

Their calls include characteristic chirping and more complex songs during breeding season. Most species display sexual dimorphism, with males showing striking head patterns and females more cryptic coloration. Their nesting habits are diverse, from cavity-nesting to creating elaborate domed structures with side entrances.

House Sparrow
Passer domesticus
LC Least Concern

Phalacrocoracidae

Cormorant

Exclusively associated with water bodies, active during daylight

Long-tailed Cormorant
Microcarbo africanus
LC Least Concern

Description

Large waterbirds with distinctive hooked bills, long necks, and characteristic wing-spreading posture needed for drying non-waterproof feathers after diving.

They possess remarkably powerful legs set far back on body, optimized for underwater propulsion, and specialized eyes that adjust for underwater vision. These birds exhibit unique throat-pouch displays during breeding, accentuated by brilliant colours on bare facial skin.

Their flight is powerful and direct, typically low over water. Diving behaviour is distinctive, disappearing with barely a ripple and remaining submerged for extended periods. Rookeries feature complex social hierarchies displayed through elaborate posturing and vocalizations.


Long-tailed Cormorant

Picidae

Woodpeckers, Piculets
Wrynecks

Primarily forest-dwelling, active during daylight

Melancholy Woodpecker
Dendropicos lugubris
LC Least Concern

Description

Distinctive forest birds with chisel-like bills, remarkably long, barbed tongues that can extend far beyond bill tip, and specialized zygodactyl feet (two toes forward, two backward) for vertical trunk climbing. They possess extraordinarily strong neck muscles supporting rapid drumming behaviours, and unique shock-absorbing skull structures preventing brain damage.

Their stiff, supportive tail feathers serve as props when climbing. These birds produce characteristic undulating flight patterns and distinctive drumming communication that carries over long distances. Many species display dramatic red, black, and white plumage patterns, with red typically more extensive in males.

Buff-spotted Woodpecker
Pardipicus nivosus
LC Least Concern

Buff-spotted Woodpecker

Platysteiridae

Wattle-eyes, Batises
Shrikes, Flycatchers

Found in forests and dense thickets, active during daylight

West African Wattle-eye
Dyaphorophyia hormophora
LC Least Concern

Description

Small, compact flycatcher-like birds with distinctive broad, flattened bills ideal for insect capture, and conspicuous eye-wattles in many species. They possess remarkable black and white plumage patterns creating effective camouflage in dappled forest light, often with contrasting throat or wing patches.

These birds exhibit characteristic tail-flicking behaviours while foraging, and distinctive “butterfly flight” displays during courtship. Their calls are typically repetitive whistles delivered from mid-canopy perches. Most species display sexual dimorphism, with females often showing rufous where males show black.

Their specialized foraging involves characteristic sallying flights from favourite perches.

Common Wattle-eye
Platysteira cyanea
LC Least Concern

Common Wattle-eye (Juvenile)

Ploceidae

Weavers, Widowbird Malimbe

Found across thickets, grassy areas, and near human settlements, active during daylight

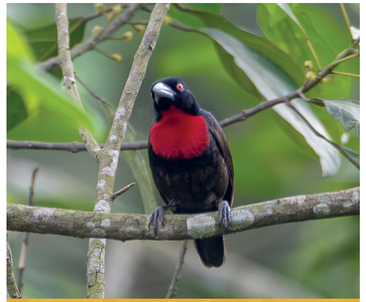
Description

Compact, seed-eating birds with thick, conical bills, bright yellow or red plumage (in breeding males), and extraordinary nest-building abilities that give the family its name. They possess specialized bill and foot coordination enabling complex weaving of plant fibers into elaborate pendulous nests, often in colonies.

These birds exhibit dramatic seasonal plumage changes, with males molting from brilliant breeding colors to female-like appearance. Their calls include melodious warbling and chattering contact notes. Colony behavior shows complex social hierarchies with sophisticated communication. Flight patterns typically involve short, direct movements between feeding and nesting areas.

Yellow-mantled Widowbird
Euplectes macroura
LC Least Concern

Village Weaver
Ploceus cucullatus
LC Least Concern



Blue-billed Malimbe
Malimbus nitens
LC Least Concern

Black-necked Weaver
Ploceus nigricollis
LC Least Concern

Red-vented Malimbe
Malimbus scutatus
LC Least Concern

Chestnut-and-black Weaver
Ploceus castaneofuscus
LC Least Concern

Chestnut-and-black Weaver

Pycnonotidae

Greenbulls, Bulbuls
Bristlebills

Found across forests and thickets, active during daylight


Swamp Greenbul

Description

Medium-sized, vocal birds with distinctive crested heads, moderately long tails often showing distinctive patterns, and soft, fluffy plumage particularly around the rump. They possess remarkable vocal abilities producing a wide range of musical calls, including complex mimicry and duetting. These birds exhibit characteristic active, restless behaviour with distinctive perching poses, frequently raising crest feathers when agitated.

Many species display subtle olive, yellow, or grey plumage with distinctive facial patterns or bright undertail coverts. Their flight is bounding and slightly undulating between patches of vegetation. Social behaviour includes loose flocking arrangements with sophisticated alert systems.

Swamp Greenbul
Thescelocichla leucopleura
LC Least Concern

Icterine Greenbul
Phyllastrephus icterinus
LC Least Concern

Grey-headed Bristlebill
Bleda canicapillus
LC Least Concern

Little Greenbul
Eurillas virens
LC Least Concern

Red-tailed Greenbul
Criniger calurus
LC Least Concern

Simple Greenbul
Chlorocichla simplex
LC Least Concern

Plain Greenbul
Eurillas curvirostris
LC Least Concern

Recurvirostridae

Stilts and Avocets

Exclusively found in shallow wetlands, active during daylight

White-crowned Lapwing

Description

Elegant wading birds with extraordinarily long, thin legs, elongated bodies, and distinctive upturned bills in avocets or straight needle-like bills in stilts. They possess remarkable black and white plumage patterns creating effective disruptive camouflage against water reflections. These birds demonstrate distinctive feeding behaviours, including side-to-side bill sweeping in avocets and precise picking in stilts. Their calls include sharp alarm notes that coordinate flock responses to threats. Flight appears delicate with long legs trailing noticeably behind. Nest defence includes elaborate distraction displays, with adults feigning injury to draw predators away from nests.

White-crowned Lapwing LC Least Concern

Vanellus albiceps

Black-winged Stilt LC Least Concern

Himantopus himantopus

Black-winged Stilt

Sturnidae

Starlings

Found across woodlands and human settlements, active during daylight

Splendid Starling LC Least Concern

Lamprotornis splendidus

Description

Medium-sized birds with strong, straight bills, triangular wings enabling swift, direct flight, and distinctive walking gait rather than hopping. They possess extraordinary vocal mimicry abilities, incorporating mechanical and animal sounds into complex songs. Their plumage often displays iridescent qualities that shift with viewing angle, from deep purples to greens and bronzes.

These birds exhibit remarkable murmurations—coordinated flight of thousands moving as single organism. Their gregarious nature extends to communal roosting in massive numbers. Most species display seasonal changes in bill coloration, becoming brighter during breeding season.

They're remarkably adaptable, with complex problem-solving abilities.

Splendid Starling

Viduidae

Indigobirds and Whydahs

Found in grassy areas and thickets, active during daylight

Description

Small birds with remarkable brood parasitism specialization, with each species targeting specific estrildid finch hosts and mimicking host nestling mouth patterns. Males possess extraordinary seasonal plumage transformations, developing elaborate elongated tail feathers or distinctive breeding colours. These birds demonstrate remarkable vocal mimicry of host species' songs, crucial for successful parasitism.

Their breeding displays include characteristic hovering flights showcasing elongated ornamental plumage. Females exhibit specialized behaviours for monitoring host nests and timing egg placement. Many species show dramatic sexual dimorphism during breeding season, with females maintaining cryptic coloration year-round.

Pin-tailed Whydah
Vidua macroura

LC Least Concern

Zosteropidae

White-eyes, Yuhinas
Allies

Found across forests and thickets, active during daylight

Description

Tiny, active birds with distinctive white eye-rings that give the family its name, slightly down-curved bills, and typically olive-green plumage with yellow underparts. They possess brushed tongues adapted for nectar feeding while maintaining omnivorous diets. These birds exhibit remarkable cohesive flock movements, maintaining contact through constant soft contact calls.

Their foraging behaviour is characterized by acrobatic manoeuvres, often hanging upside-down to access food. Flight is swift and direct between vegetation patches. Most species show minimal sexual dimorphism, with pairs maintaining strong bonds. They're notable for their rapid colonization abilities when introduced to new areas.

Northern Yellow White-eye
Zosterops senegalensis

LC Least Concern

CHECKLIST OF BIRDS SPECIES

This checklist consists of all the species reliably recorded at the Tarkwa Mine and presents species in taxonomic sequence.

Common Name	Scientific Name	Global Distr.
Anatidae		
White-faced Whistling-Duck	*Dendrocygna viduata*	
Columbidae		
African Green-Pigeon	*Treron calvus*	
Blue-spotted Wood-Dove	*Turtur afer*	
Laughing Dove	*Streptopelia senegalensis*	
Red-eyed Dove	*Streptopelia semitorquata*	
Tambourine Dove	*Turtur tympanistria*	
Musophagidae		
Yellow-billed Turaco	*Tauraco macrorhynchus*	BR
Western Plantain-eater	*Crinifer piscator*	
Cuculidae		
African Cuckoo	*Cuculus gularis*	
African Emerald Cuckoo	*Chrysococcyx cupreus*	
Black-throated Coucal	*Centropus leucogaster*	BR
Blue Malkoha	*Ceuthmochares aereus*	
Blue-headed Coucal	*Centropus monachus*	BR
Dideric Cuckoo	*Chrysococcyx caprius*	
Klaas's Cuckoo	*Chrysococcyx klaas*	
Senegal Coucal	*Centropus senegalensis*	
Apodidae		
African Palm-Swift	*Cypsiurus parvus*	BR
Black Spinetail	*Telacanthura melanopygia*	BR
Cassin's Spinetail	*Neafrapus cassini*	BR
Little Swift	*Apus affinis*	BR
Sarothruridae		
White-spotted Flufftail	*Sarothrura pulchra*	BR

Note: **BR** = Biome Restricted Species

Common Name	Scientific Name	Global Distr.
Rallidae		
African Crake	*Crex egregia*	
Recurvirostridae		
Black-winged Stilt	*Himantopus himantopus*	
White-headed Lapwing	*Vanellus albiceps*	
Jacanidae		
African Jacana	*Actophilornis africanus*	
Scolopacidae		
Common Sandpiper	*Actitis hypoleucos*	
Ardeidae		
Cattle Egret	*Bubulcus ibis*	
Accipitridae		
Black Kite	*Milvus migrans*	
Lizard Buzzard	*Kaupifalco monogrammicus*	
Palm-nut Vulture	*Gypohierax angolensis*	
Red-chested Goshawk	*Accipiter toussenelii*	
Bucerotidae		
African Pied Hornbill	*Lophoceros fasciatus*	BR
White-crested Hornbill	*Horizocerus albocristatus*	BR
Black Dwarf Hornbill	*Horizocerus hartlaubi*	BR
Piping Hornbill	*Bycanistes fistulator*	
Alcedinidae		
African Pygmy-Kingfisher	*Ispidina picta*	BR
Woodland Kingfisher	*Halcyon senegalensis*	
Blue-breasted Kingfisher	*Halcyon malimbica*	
Meropidae		
Little Bee-eater	*Merops pusillus*	
Coraciidae		
Broad-billed Roller	*Eurystomus glaucurus*	
Blue-throated Roller	*Eurystomus gularis*	BR
Indicatoridae		
Lesser Honeyguide	*Indicator minor*	

Note: **BR** = Biome Restricted Species

Common Name	Scientific Name	Global Distr.
Lybiidae		
Yellow-billed Barbet	*Trachyphonus purpuratus*	BR
Naked-faced Barbet	*Gymnobucco calvus*	BR
Speckled Tinkerbird	*Pogoniulus scolopaceus*	BR
Red-rumped Tinkerbird	*Pogoniulus atroflavus*	BR
Yellow-throated Tinkerbird	*Pogoniulus subsulphureus*	
Yellow-rumped Tinkerbird	*Pogoniulus bilineatus*	
Yellow-spotted Barbet	*Buccanodon duchaillui*	BR
Hairy-breasted Barbet	*Tricholaema hirsuta*	BR
Vieillot's Barbet	*Lybius vieilloti*	
Picidae		
African Piculet	*Verreauxia africana*	BR
Fire-bellied Woodpecker	*Chloropicus pyrrhogaster*	BR
Buff-spotted Woodpecker	*Campethera nivosa*	BR
Falconidae		
Gray Kestrel	*Falco ardosiaceus*	
African Hobby	*Falco cuvierii*	

Note: **BR** = Biome Restricted Species

Common Name	Scientific Name	Global Distr.
Oriolidae		
Western Black-headed Oriole	*Oriolus brachyrynchus*	BR
Black-winged Oriole	*Oriolus nigripennis*	BR
Platysteiridae		
Brown-throated Wattle-eye	*Platysteira cyanea*	
West African Wattle-eye	*Platysteira hormophora*	BR
Red-cheeked Wattle-eye	*Platysteira blissetti*	BR
Malaconotidae		
Black-crowned Tchagra	*Tchagra senegalus*	
Northern Puffback	*Dryoscopus gambensis*	
Dicruridae		
Western Square-tailed Drongo	*Dicrurus occidentalis*	BR
Velvet-mantled Drongo	*Dicrurus modestus*	
Monarchidae		
Blue-headed Crested-Flycatcher	*Trochocercus nitens*	BR
Black-headed Paradise-Flycatcher	*Terpsiphone rufiventer*	BR
Corvidae		
Pied Crow	*Corvus albus*	

Common Name	Scientific Name	Global Distr.
Nicatoridae		
Western Nicator	*Nicator chloris*	BR
Macrosphenidae		
Gray Longbill	*Macrosphenus concolor*	BR
Green Crombec	*Sylvietta virens*	BR
Green Hylia	*Hylia prasina*	BR
Kemp's Longbill	*Macrosphenus kempi*	BR
Tit-hylia	*Pholidornis rushiae*	BR
Cisticolidae		
Green-backed Camaroptera	*Camaroptera brachyura*	
Olive-green Camaroptera	*Camaroptera chloronota*	BR
Sharpe's Apalis	*Apalis sharpii*	BR
Siffling Cisticola	*Cisticola brachypterus*	
Tawny-flanked Prinia	*Prinia subflava*	
Whistling Cisticola	*Cisticola lateralis*	
Yellow-browed Camaroptera	*Camaroptera superciliaris*	BR
Acrocephalidae		
Melodious Warbler	*Hippolais polyglotta*	

Note: **BR** = Biome Restricted Species

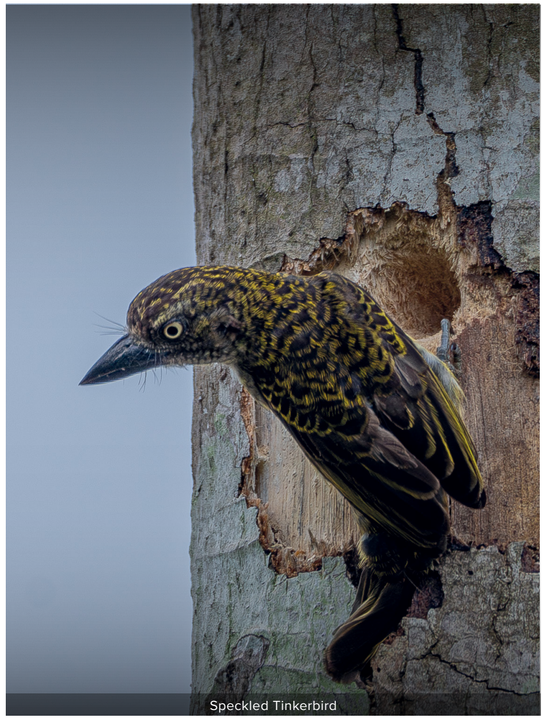
Common Name	Scientific Name	Global Distr.
Hirundinidae		
Bank Swallow	*Riparia riparia*	
Ethiopian Swallow	*Hirundo aethiopica*	
Preuss's Swallow	*Petrochelidon preussi*	BR
Square-tailed Sawwing	*Psalidoprocne nitens*	BR
Fanti Sawwing	*Psalidoprocne obscura*	BR
Pycnonotidae		
Ansorge's Greenbul	*Eurillas ansorgei*	BR
Common Bulbul	*Pycnonotus barbatus*	
Gray Greenbul	*Eurillas gracilis*	BR
Gray-headed Bristlebill	*Bleda canicapillus*	BR
Honeyguide Greenbul	*Baeopogon indicator*	BR
Little Greenbul	*Eurillas virens*	
Plain Greenbul	*Eurillas curvirostris*	BR
Red-tailed Greenbul	*Criniger calurus*	BR
Simple Greenbul	*Chlorocichla simplex*	BR
Slender-billed Greenbul	*Stelgidillas gracilirostris*	BR
Spotted Greenbul	*Ixonotus guttatus*	BR
Swamp Greenbul	*Thescelocichla leucopleura*	BR

Common Name	Scientific Name	Global Distr.
Western Bearded Greenbul	*Criniger barbatus*	BR
Yellow-whiskered Greenbul	*Eurillas latirostris*	
Zosteropidae		
African Yellow White-eye	*Zosterops senegalensis*	
Pellorneidae		
Brown Illadopsis	*Illadopsis fulvescens*	BR
Sturnidae		
Splendid Starling	*Lamprotornis splendidus*	BR
Muscicapidae		
Forest Robin	*Stiphrornis erythrothorax*	BR
Ploceidae		
Black-necked Weaver	*Ploceus nigricollis*	BR
Blue-billed Malimbe	*Malimbus nitens*	BR
Red-headed Malimbe	*Malimbus rubricollis*	BR
Vieillot's Weaver	*Ploceus nigerrimus*	
Village Weaver	*Ploceus cucullatus*	
Yellow-mantled Weaver	*Ploceus tricolor*	BR
Yellow-mantled Widowbird	*Euplectes macroura*	

Common Name	Scientific Name	Global Distr.
Nectariniidae		
Fraser's Sunbird	*Deleornis fraseri*	BR
Little Green Sunbird	*Anthreptes seimundi*	
Green Sunbird	*Anthreptes rectirostris*	
Collared Sunbird	*Hedydipna collaris*	
Reichenbach's Sunbird	*Anabathmis reichenbachii*	
Green-headed Sunbird	*Cyanomitra verticalis*	
Blue-throated Brown Sunbird	*Cyanomitra cyanolaema*	BR
Olive Sunbird	*Cyanomitra olivacea*	
Buff-throated Sunbird	*Chalcomitra adelberti*	BR
Olive-bellied Sunbird	*Cinnyris chloropygius*	
Tiny Sunbird	*Cinnyris minullus*	
Johanna's Sunbird	*Cinnyris johannae*	
Splendid Sunbird	*Cinnyris coccinigastrus*	
Superb Sunbird	*Cinnyris superbus*	BR
Copper Sunbird	*Cinnyris cupreus*	
Passeridae		
House Sparrow	*Passer domesticus*	
Northern Gray-headed Sparrow	*Passer griseus*	

Common Name	Scientific Name	Global Distr.
Viduidae		
Pin-tailed Whydah	*Vidua macroura*	
Motacillidae		
African Pied Wagtail	*Motacilla aguimp*	
Plain-backed Pipit	*Anthus leucophrys*	
Fringillidae		
Yellow-fronted Canary	*Crithagra mozambica*	
Estrildidae		
Black-and-white Mannikin	*Spermestes bicolor*	BR
Black-bellied Firefinch	*Lagonosticta rara*	
Black-bellied Seedcracker	*Pyrenestes ostrinus*	BR
Bronze Mannikin	*Spermestes cucullata*	
Chestnut-breasted Nigrita	*Nigrita bicolor*	BR
Gray-headed Nigrita	*Nigrita canicapillus*	
Orange-cheeked Waxbill	*Estrilda melpoda*	
Western Bluebill	*Spermophaga haematina*	BR

Note: **BR** = Biome Restricted Species



Speckled Tinkerbird

Mammals

Introduction

Mammals are of key ecological and socio-economic importance in many communities. They serve as a major source of animal protein in both rural and urban communities in Ghana, a factor that make mammals the worst victims of the bushmeat trade.

Besides seed dispersal, mammals are also known to facilitate the germination of seeds of some key forest tree species. Based on their importance the Gold Fields Ghana has instituted a **"No Hunting Policy"** at the Tarkwa Mine and this has resulted in large numbers of certain mammal species which has increased the encounter rate of species such as the Bushbuck (*Tragelaphus scriptus*).

A total of 17 large mammals species have been recorded at the site through extensive surveys. Through camera trapping, the pictures of a dozen few species were captured on site and presented in this catalogue showing their conservation status.

Viverridae

Civets, Genets, Linsangs, and Relatives

Primarily forest and thicket dwelling, nocturnal

Large-Spotted Genet
Genetta tigrina

LC Least Concern

Description

Medium-sized carnivores with distinctive black and white patterns, ranging from spots to stripes. They possess elongated bodies, pointed muzzles, retractable or semi-retractable claws, and lengthy ringed tails. These primarily nocturnal mammals have specialized scent glands and excellent climbing abilities, though some are more terrestrial.

Their faces display dark eye masks contrasting with lighter facial fur. Remarkable for their secretive nature, they show diverse hunting strategies from ambush to active pursuit. Females typically maintain exclusive territories marked by scent deposits.

African Civet
Civettictis civetta

LC Least Concern

Nesomyidae

African Giant Rats and Relatives

Found across forests, thickets, and near human settlements, primarily nocturnal

Description

Large, adaptable rodents with distinctively elongated bodies, prominent rounded ears, and exceptionally long, scaly tails used for balance during climbing. They possess specialized cheek pouches for carrying food, and remarkably sensitive whiskers used for navigation in dark environments.

These predominantly nocturnal mammals show extraordinary olfactory abilities, detecting buried objects and distinguishing complex scents. Their incisors grow continuously, requiring constant gnawing to maintain proper length. Many species construct complex burrow systems with multiple chambers or utilize tree hollows. They display remarkable intelligence, with documented problem-solving abilities and excellent spatial memory.

African Giant Rat
Cricetomys gambianus

LC Least Concern

Pteropodidae

Old World fruit bats

(also: flying foxes)

Forest canopy and human settlements, nocturnal

Straw-coloured Fruit Bat
Eidolon helvum

NT Near Threatened

Description

Large fruit-eating bats with distinctive fox-like faces, large forward-facing eyes, and no echolocation ability. They possess exceptionally long wings adapted for sustained flight and efficient gliding. Their fur ranges from pale straw to tawny brown, often with contrasting neck ruffs. These nocturnal mammals form large colonies in trees, displaying complex social hierarchies. They show remarkable spatial memory for locating fruiting trees and play crucial roles in seed dispersal and pollination. Their wing membranes are often used to wrap around food items while feeding.

Straw-coloured Fruit Bat

Straw-coloured Fruit Bat

Straw-coloured Fruit Bat

Bovidae

Antelopes, Duikers, Gazelles and relatives

Forest and dense thicket, primarily crepuscular

Cape Bushbuck
Tragelaphus scriptus

LC Least Concern

Description

Medium-sized forest ungulates with smooth, dense coats ranging from reddish-brown to dark chocolate. Males possess short, upright or slightly backward-curving horns, while females typically lack them or have shorter versions. These shy, mainly crepuscular mammals have distinctive white markings on throat and rump, large mobile ears, and exhibit cautious, solitary behaviour in forested habitats. They demonstrate remarkable stealth despite size, using specialized gait patterns for silent movement. Most species are selective browsers, showing preference for specific plant species.

Maxwell's Duiker
Philantomba maxwellii
LC Least Concern

Black Duiker
Cephalophus niger
LC Least Concern

Cape Bushbuck

Herpestidae

Mongooses

Forest floor and thicket, diurnal foragers

Long-nosed Cusimanse
Crossarchus obscurus

LC Least Concern

Description

Small to medium-sized carnivores with remarkably elongated bodies, short powerful legs, and distinctive pointed snouts used for foraging in leaf litter and soil.

They possess non-retractable claws adapted for digging, and their fur ranges from uniformly dark to grizzled patterns. These diurnal mammals display highly coordinated social behaviors, including cooperative hunting and sentinel systems.

They exhibit remarkable snake-fighting abilities, showing quick reflexes and thick skin resistant to venom. Their vocalizations include complex contact calls maintaining group cohesion during foraging.

Marsh Mongoose
Atilax paludinosus

LC Least Concern

Hystricidae

Old World Porcupines

Found across forests and thickets, exclusively nocturnal

African brush-tailed Porcupine
Atherurus africanus

LC Least Concern

Description

Large, heavily-built rodents with their most distinctive feature being modified hairs forming quills of varying lengths covering the back and sides. They possess specialized hollow quills that produce alarming rattling sounds when shaken as a warning.

These nocturnal mammals have remarkably powerful jaw muscles and teeth capable of gnawing through even hardwood trees. Their shuffling gait belies surprising climbing ability in some species.

Defense mechanisms include backward walking toward threats, erecting quills, and stamping feet. Many species create elaborate burrow systems with multiple chambers and separate latrine areas.

Cercopithecidae

Old World monkeys

Predominantly arboreal forest dwellers, diurnal

Mona Monkey
Cercopithecus mona

LC Least Concern

Description

Medium-sized, highly intelligent primates with forward-facing eyes and distinctive facial markings. They possess elongated muzzles, opposable thumbs, and non-prehensile tails used for balance.

These diurnal, mainly arboreal mammals live in complex social groups with clear hierarchies, exhibiting diverse communication through vocalizations, facial expressions, and body postures.

Their cheek pouches allow food storage while foraging. Most species show sexual dimorphism in size and coloration. They demonstrate remarkable problem-solving abilities and tool use.

Lesser spot-nosed Monkey LC Least Concern
Cercopithecus petaurista

Lesser spot-nosed Monkey

CHECKLIST OF MAMMAL SPECIES

This checklist consists of all the species reliably recorded at the Tarkwa Mine and presents species in taxonomic sequence.

Common Name	Scientific Name
Bovidae	
Cape Bushbuck	*Tragelaphus scriptus*
Maxwell Duiker	*Philantomba maxwellii*
Black Duiker	*Cephalophus niger*
Royal Antelope	*Neotragus pygmaeus*
Cercopithecidae	
Mona Monkey	*Cercopithecus mona*
Lesser spot-nosed Monkey	*Cercopithecus petaurista*
Galagidae	
Demidoff's Galago	*Galagoides demidovii*
Herpestidae	
Common Cusimanse	*Crossarchus obscurus*
Marsh Mongoose	*Atilax paludinosus*

Common Name	Scientific Name
Hystricdae	
Crested Porcupine	*Hystrix cristata*
Brush-tailed Porcupine	*Atherurus africanus*
Lrisidae	
Bosman's Potto	*Perodicticus potto*
Manidae	
Tree Pangolin	*Phataginus tricuspis*
Nandiniidae	
African Palm Civet	*Nandinia binotata*
Nesomyidae	
Giant Pouched Rat	*Cricetomys gambianus*
Procaviidae	
Western Tree Hyrax	*Dendrohyrax dorsalis*

Common Name	Scientific Name
Pteropodidae	
Straw-coloured Fruit Bat	*Eidolon helvum*
Sciuridae	
Striped Ground Squirrel	*Ictidomys tridecemlineatus*
Thryonomyidae	
Lesser Cane rat	*Thryonomys gregorianus*
Greater Cane rat	*Thryonomys swinderianus*
Viverridae	
African Civet	*Civettictis civetta*

Butterflies

Introduction

Butterflies occur in all parts of the world, but they are primarily tropical. There are more than 20,000 species of butterflies worldwide (Larsen, 2006) and about 4,000 species have been identified so far from Africa (Larsen, 1994, 2006). The different species and their occurrence in an area depend on various factors such as the extent of ecological damage and the availability of suitable food plants (Kyerematen et al., 2014c). Currently, Ghana has about 925 species of butterflies (Larsen, 2006), most of which have been described from the various protected areas and reserves (Larsen, 2006).

Butterflies are useful insects and are of considerable economic importance. In addition to their role as efficient pollinators, pest control agents, and food for other organisms, they are also important indicators in ecosystem management (Kyerematen et al., 2018a, b). This section of the catalogue showcases the diverse butterfly species found within the Tarkwa mine ecological landscape. Surveys recorded over 40 butterfly species in five prominent butterfly families: Nymphalidae, Pieridae, Papilionidae, Lycaenidae, and Hesperiidae, each contributing to the region's rich biodiversity have been presented.

Hesperiidae

Skippers

Found in grassy areas and thickets, active during daylight

Clouded Flat
Tagiades flesus
LC Least Concern

Description

Robust butterflies with distinctive hooked antennae tips, triangular wings, and remarkably powerful flight characterized by rapid, darting movements that inspired their common name. They possess disproportionately large bodies relative to wing size, creating a moth-like appearance. These insects typically hold their wings in a distinctive partial-open position when perched. Their flight muscles generate incredible power, enabling exceptional speed and manoeuvrability. Most species display cryptic coloration in browns, greys, and oranges with subtle patterning. Many exhibit characteristic basking behaviour with wings angled to maximize sun exposure.

Rare Morant Skipper
Parosmodes lentiginosa
LC Least Concern

White-spotted Forest Swift
Melphina statira
LC Least Concern

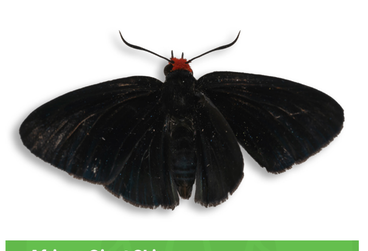
Savannah Elf
Eretis lugens
LC Least Concern

Small Swift
Borbo perobscura
LC Least Concern

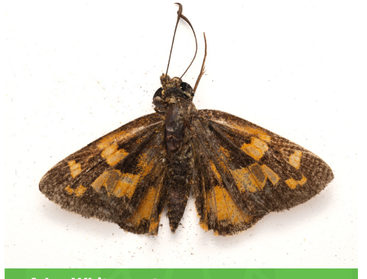
Striped Policeman
Coeliades forestan
LC Least Concern

Fiery Small Fox
Teniorhinus ignita
LC Least Concern

Western Blue Policeman
Pyrrhiades lucagus
LC Least Concern



African Giant Skipper
Pyrrhochalcia iphis
LC Least Concern



Adon White-spots
Osmodes adon
LC Least Concern

Lycaenidae

Blues, Coppers, and Hairstreaks

Found across thickets and forest edges, active during daylight

Black-patch Hairstreak
Hypolycaena liara

LC Least Concern

Description

Small, delicate butterflies with distinctive metallic sheen to their wing scales, often displaying brilliant blue, copper, or purple iridescence. They possess specialized organs on caterpillars that secrete honeydew attracting protective ants. Their wings often feature distinctive hair-like extensions on hind-wings creating “false antennae” at the rear.

These insects exhibit remarkable sexual dimorphism, with males typically more vibrantly coloured than females. Many species display complex courtship behaviours including aerial dances and pheromone displays. Their flight is typically weak and fluttering, remaining close to vegetation.

Black-patch Hairstreak (side view)

Papilionidae

Swallowtails

Found across forests and thickets, active during daylight

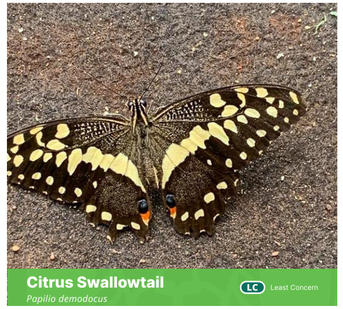
Small striped Swordtail
Graphium policenes

LC Least Concern

Description

Large, spectacular butterflies with distinctive elongated hind-wing projections resembling tails, and remarkable flight capabilities including hovering and rapid directional changes. They possess specialized osmeterium organs in caterpillar stage that emit defensive repellent chemicals when threatened.

Their wing patterns often incorporate dramatic eye-spots, iridescent scaling, and striking colour contrasts. These insects display complex territorial behaviours with males patrolling specific routes awaiting females. Many species exhibit remarkable mimicry of toxic species despite being palatable themselves. Their flight is powerful and sustained, often with distinctive gliding phases.



Citrus Swallowtail
Papilio demodocus

LC Least Concern

Citrus Swallowtail (side view)

Pieridae

Whites and Sulphurs

Found across thickets, grassy areas, and cultivated lands, active during daylight

Dirty Albatross White
Appias phaola
LC Least Concern

Description

Medium-sized butterflies with predominantly white, yellow, or orange wings often edged with distinctive black margins or spotting. They possess specialized wing scales containing compounds that reflect ultraviolet light, creating patterns visible only to butterfly vision. These insects demonstrate remarkable adaptation to cruciferous plant toxins, sequestering chemicals for their own defence. Many species exhibit dramatic seasonal variations in wing patterns and coloration. Their flight is typically direct and purposeful, with sustained periods of active movement. Some species demonstrate extraordinary migratory behaviour, traveling in massive numbers during seasonal movements.

Western Dotted Border (side view)

Calypso Caper White (side view)

African Wood White (side view)

Common Grass Yellow
Eurema hecabe
LC Least Concern

Forest Grass Yellow
Eurema senegalensis
LC Least Concern

African Migrant
Catopsilia florella
LC Least Concern

African Wood White
Leptosia alcesta
LC Least Concern

Calypso Caper White
Belenois calypso
LC Least Concern

Western Dotted Border
Mylothris chloris
LC Least Concern

Nymphalidae

Brush-footed Butterflies

Found across diverse habitats from forests to grasslands, active during daylight

Plain Tiger Butterfly
Danaus chrysippus
LC Least Concern

Description

Diverse family with reduced, brush-like forelegs not used for walking, creating the appearance of four-legged butterflies. They possess remarkable wing patterns often featuring eye-spots for predator deterrence or cryptic patterns mimicking leaves or bark. These insects exhibit extraordinary migratory behaviours in some species, traveling thousands of kilometres annually. Their caterpillars typically display defensive spines or tubercles. Many species show seasonal forms with dramatically different appearances between wet and dry seasons. Flight patterns vary widely from powerful, soaring flight to erratic movement designed to confuse predators.

Small Stately Bush Brown
Bicyclus evadne
LC Least Concern

Swamp Palm Forester
Bebearia paludicola
LC Least Concern

Blue Monarch
Tirumala petiverana
LC Least Concern

Hewitson's Acraea
Acraea alciope
LC Least Concern

Orange-streak Acraea
Acraea bonasia
LC Least Concern

Large Smoky Acraea
Acraea camaena
LC Least Concern

Elegant Acraea
Acraea egina
LC Least Concern

Wandering Donkey Acraea
Acraea neobule
LC Least Concern

Westwood's Acraea
Acraea pseudegina
LC Least Concern

Small Orange Acraea LC Least Concern
Acraea serena

Smoky Bematistes LC Least Concern
Bematistes vestalis

Large Spotted Acraea LC Least Concern
Acraea zetes

Small Monk LC Least Concern
Amauris damocles

Friar LC Least Concern
Amauris niavius

Forest Glade Nymph LC Least Concern
Aterica galene

African Castor LC Least Concern
Ariadne enotrea

Light Bush Brown LC Least Concern
Bicyclus dorothea

Brown-spot Bush Brown LC Least Concern
Bicyclus madetes

Dark Vulgar Bush Brown LC Least Concern
Bicyclus sandace

Vulgar Bush Brown LC Least Concern
Bicyclus vulgaris

Spotted Joker LC Least Concern
Byblia ilithyia

Common Pathfinder LC Least Concern
Catuna crithea

Bamboo Charaxes LC Least Concern
Charaxes boueti

Western Red Charaxes LC Least Concern
Charaxes cynthia

White-barred Emperor LC Least Concern
Charaxes brutus

Common Yellow Glider LC Least Concern
Cymothoe egesta

Common Blue-banded Forester LC Least Concern
Euphaedra harpalyce

Common Pink Forester LC Least Concern
Euphaedra xypete

Common Nymph LC Least Concern
Euriphene barombina

Western Hallelesis LC Least Concern
Hallelesis halyma

Blue-spot Pansy LC Least Concern
Junonia oenone

Little Pansy LC Least Concern
Junonia sophia

Soldier Commodore LC Least Concern
Junonia terea

Common Evening Brown LC Least Concern
Melanitis leda

Original Club-dot Sailer LC Least Concern
Neptis melicerta

Yellow-base Sailer LC Least Concern
Neptis metella

Broken-club Sailer LC Least Concern
Neptis nebrodes

Nemetes Sailer LC Least Concern
Neptis nemetes

Gaudy Commodore LC Least Concern
Precis octavia

Clouded Mother-of-Pearl LC Least Concern
Protogoniomorpha anacardii

Common Ringlet LC Least Concern
Ypthima doleta

Friar (side view)

Hewitson's Acraea (side view)

Spotted Joker (side view)

White-barred Emperor (side view)

CHECKLIST OF BUTTERFLIES SPECIES

This checklist consists of all the species reliably recorded at the Tarkwa Mine and presents species in no taxonomic sequence.

Common Name	Scientific Name
Hesperiidae	
African Giant Skipper	*Pyrrhochalcia iphis*
Rare Morant Skipper	*Parosmodes lentiginosa*
Western Blue Policeman	*Pyrrhiades lucagus*
Two Pip Policeman	*Coeliades pisistratus*
Striped Policeman	*Coeliades forestan*
Clouded Flat	*Tagiades flesus*
Savannah Elf	*Eretis lugens*
Fiery Small Fox	*Teniorhinus ignita*
Adon White-Spots	*Osmodes adon*
Adosus White-Spots	*Osmodes adosus*
Small Swift	*Borbo perobscura*
Twin Swift	*Borbo gamella*
White-patch Forest Swift	*Melphina malthina*
White-spotted Forest Swift	*Melphina statira*

Common Name	Scientific Name
Lycaenidae	
Capronnier's Cupid	*Euchrysops albistriata*
Black-patch Hairstreak	*Hypolycaena liara*
Common Fairy Hairstreak	*Hypolycaena hatita*
Branded Silky Skipper	*Semalea pulvina*
Lowland Branded Blue	*Uranothauma falkensteini*
Aruma Hairstreak	*Hypokopelatis aruma*
Papilionidae	
Narrow Green-banded Swallowtail	*Papilio nireus*
Broadly Green-banded Swallowtail	*Papilio chrapkowskoides*
Western Bush Kite Swallowtail	*Papilio horribilis*
Western Emperor Swallowtail	*Papilio menestheus*
Common White-banded Swallowtail	*Papilio cyproeofila*
Small striped Swordtail	*Graphium policenes*
Veined Swordtail	*Graphium leonidas*

Common Name	Scientific Name
Pieridae	
No-brand Grass Yellow	*Eurema brigitta*
Forest Grass Yellow	*Eurema senegalensis*
Common Grass Yellow	*Eurema hecabe*
Malagasy Grass Yellow	*Eurema floricola*
Cambridge Vagrant	*Nepheronia thalassina*
Large Vagrant	*Nepheronia argia*
Round-winged Vagrant	*Nepheronia pharis*
Calypso Caper White	*Belenois calypso*
African Caper	*Belenois creona*
Forest Caper White	*Belenois theora*
Pioneer Caper White	*Belenois aurota*
African Migrant	*Catopsilia florella*
Western Dotted Border	*Mylothris poppea*
Common Dotted Border	*Mylothris rhodope*
Western Dotted Border	*Mylothris chloris*
Rüppell's Dotted Border	*Mylothris jaopura*
Round-wing Dotted Border	*Mylothris schumanni*
Capricorn White	*Dixeia cebron*
African Wood White	*Leptosia alcesta*

Common Name	Scientific Name
Nymphalidae	
Large True Forester	*Euphaedra sarcoptera*
Widespread Forester	*Euphaedra medon*
Common Pink Forester	*Euphaedra xypete*
Orange Forester	*Euphaedra eleus*
Edwards' Forester	*Euphaedra edwardsi*
Crocker's Forester	*Euphaedra crockeri*
Golden Piper,	*Eurytela dryope*
Simple Nymph	*Euriphene simplex*
Common Nymph	*Euriphene barombina*
False Wanderer	*Pseudacraea eurytus*
False Diadem	*Pseudacraea lucretia*
Incipient False Acraea	*Pseudacraea warburgi*
Boisduval's False Acraea	*Pseudacraea boisduvalii*
Blue Sergeant	*Pseudoneptis bugandensis*
Dark Palm Forester	*Bebearia mandana*
Large Pathfinder	*Catuna catuna*
Common Pathfinder	*Catuna crithea*
Forest Glade Nymph	*Aterica galene*

Common Name	Scientific Name
Jodutta Glider	*Cymothoe jodutta*
Common Red Glider	*Cymothoe coccinata*
Western Red Glider	*Cymothoe mabilei*
Original Club-dot Sailer	*Neptis melicerta*
Yellow-base Sailer	*Neptis metella*
Savanna Sailer	*Neptis morosa*
Typical Sailer	*Neptis seeldrayersi*
Serene Sailer	*Neptis serena*
Soldier Pansy	*Junonia terea*
Dark Blue Pansy	*Junonia oenone*
Gaudy Commodore	*Precis octavia*
Common Leopard	*Phalanta phalantha*
African Castor	*Ariadne enotrea*
Common Joker	*Byblia anvatara*
Danaid Eggfly	*Hypolimnas misippus*
Blue Diadem	*Hypolimnas salmacis*

Common Name	Scientific Name
Blood-brother Bematistes,	*Acraea consanguinea*
Smoky Bematistes	*Acraea vestalis*
Small Orange Acraea	*Acraea serena*
Common Bematistes	*Acraea epaea*
Scalloped Yellow Glider	*Cymothoe fumana*

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Appendices

Appendix 1.1

Glossary of Terms

IUCN Red List: The International Union for Conservation of Nature's Red List is a globally recognized inventory that assesses the conservation status of plant and animal species. It categorizes species based on their risk of extinction, ranging from "Least Concern" to "Extinct."

Conservation Status: A classification used to indicate the likelihood that a species will go extinct in the near future. Species are typically categorized by a range of terms, from "Least Concern" to "Critically Endangered," based on population trends, habitat threats, and other ecological factors.

STAR Rating: A system used in this catalogue to assess the ecological importance and rarity of species within the Tarkwa Mine concession. The STAR rating helps prioritize conservation efforts for species based on their vulnerability and role in the ecosystem.

Habitat: The natural environment in which a species lives, grows, and thrives. Different species require different types of habitats, such as forests, grasslands, wetlands, or aquatic environments.

Endemic: Species that are found only in a specific geographic area and nowhere else in the world. Endemism can be the result of unique ecological or evolutionary factors.

Ecological Significance: The role that a species plays within its ecosystem, such as contributing to biodiversity, serving as a pollinator, or controlling pest populations.

Nocturnal: Animals that are primarily active during the night and rest during the day.

Diurnal: Animals that are active during daylight hours.

Crepuscular: Animals that are active during dawn and dusk.

Invasive Species: Non-native species that, when introduced to an area, cause harm to the environment, economy, or human health

Appendix 1.2

Conservation Status Explanation

The IUCN Red List is used to categorise species based on their risk of extinction, with the following categories:

Least Concern (LC): Species that are widespread and abundant. They face no immediate threat of extinction.

Near Threatened (NT): Species that are close to qualifying for a more threatened category in the near future. They are not yet at risk, but their populations or habitats are under threat.

Vulnerable (VU): Species that are at high risk of extinction in the wild due to a variety of threats, such as habitat loss, poaching, or climate change. These species require active conservation efforts to prevent further decline.

Endangered (EN): Species that are at a very high risk of extinction in the wild. These species have experienced significant population reductions and are under immediate threat from human activities or environmental changes.

Critically Endangered (CR): Species that are facing an extremely high risk of extinction in the wild in the immediate future. They are often very few in number and need immediate conservation action to prevent their extinction.

Extinct in the Wild (EW): Species that no longer exist in their natural habitats but are still found in captivity or through human intervention. Efforts may be underway to reintroduce these species to their natural habitats.

Extinct (EX): Species that no longer exist anywhere on Earth. They have been lost due to human activity, habitat destruction, or other factors.


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