



Establishment of a grass seed bank at a village in Garsen, Tana River Delta. Photo by Hassan Golo

## Grass Seed Banks for restoration in Tana River Delta

■ By Rudolf Makhanu

On an open piece of land at Sofia village, Tana River Delta, lies a seed bed planted with grass. Grass is a critical part of our environment, and especially here in Tana Delta, where great herds of cattle graze.

Villagers manage the 15-ha pasture seed bank planted with four varieties of grass. The Sofia seed bank is one of the many established in villages across the Delta under The Restoration Initiative (TRI) Tana project funded by the Global Environmental Facility (GEF) through the United Nations Environment Program (UNEP). Nature Kenya (implementing partner) and other partners are supporting local communities in the Delta to restore degraded grazing lands and other degraded landscapes.

Since 2021, Nature Kenya has distributed 1,942.5 kg of four pasture seed varieties

to establish 455 ha of seed banks in 29 villages, including Sofia. The distributed grass seed varieties are Needle (*Enteropogon macrostachyus*), Buffel (*Cenchrus ciliaris*), Abyssinian/Boma Rhodes (*Chloris gayana*) and Saw-toothed Love/Maasai Love (*Eragrostis superba*). Beneficiaries manage the seed banks through established community structures like village natural resources and land use committees. The pasture seed banks are treated as crops, and protected from free-ranging livestock. Once mature, the pasture seedlings are transferred for planting in degraded grazing lands.

Measuring approximately 225,000 ha on the Kenya coast, the Tana River Delta is an extraordinary ecological and cultural site. The Delta is the second largest estuarine and deltaic ecosystem in East Africa and a designated Ramsar Site, Key Biodiversity

Area (KBA), and a global biodiversity hotspot. The Delta provides diverse ecosystem services that support livelihoods and the local economy. It serves as a critical dry-season grazing ground for pastoralists.

However, unsustainable use coupled with unfavourable natural processes has compromised the Delta's ability to sustainably provide these ecosystem services and retain its ecological integrity, significantly contributing to resource use conflicts. Inadequate rangeland management is one of the main challenges in the Delta, with overgrazing being a key driver. Its associated manifestations include habitat loss, soil erosion, siltation, the spread of invasive species like *Prosopis juliflora*, conflicts over pasture, low livestock productivity, and decreased community resilience, especially during droughts and floods.

Collaboration between the Tana River and Lamu County Governments and local administration promotes community awareness and peacebuilding efforts, which in turn contribute to social fencing that safeguards the pasture seed banks. To this end, the TRI Tana project has facilitated several forums where the County Commissioner's office has convened community meetings to address grazing control issues in the Delta.

To further empower communities to actively engage in rangeland restoration, Nature Kenya has facilitated training sessions and engaged livestock extension officers to provide support services. Nature Kenya is also working with the two county governments to mainstream biodiversity needs into their policies and legislation. The TRI Tana project has supported the Tana River County review and enactment of the Livestock Grazing Control Act. The Act seeks to enhance management and orderly use of grazing resources to minimise conflict and maximise peaceful coexistence between various land users. 🐘

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## KBA in Focus: Masinga Reservoir

By Timothy Mwinami and Joshua Sese

Masinga Reservoir Key Biodiversity Area (KBA) is the largest water impoundment along the upper Tana River. It is part of the Seven Forks Hydroelectric Power Generation Scheme aimed at harnessing the water resources of the Tana River for multiple purposes, including power generation, irrigation, and water supply. The Kenya Electricity Generating Company (Kengen) and Tana and Athi Rivers Development Authority (TARDA) jointly manage the dam. The reservoir is shared by Embu and Machakos counties, and borders the Mwea National Reserve KBA to the north-east.

The KBA is a critical ecological habitat, home to a wide range of aquatic and terrestrial biodiversity. It hosts breeding colonies of African Darter, cormorants and grebes, among other water birds. The Martial Eagle, a globally endangered bird, can be seen perching on the tall trees adjacent to the dam. The Hinde's Babbler, a vulnerable and range-restricted Kenyan endemic bird, has been recorded in the Acacia trees on the eastern shores of the reservoir.

Despite its importance, the KBA faces threats from increasing human population in adjacent areas. Unregulated subsistence fishing is widespread in the dam. Gill-net fishing has been a major threat to diving birds, particularly the African Darter. Poor land use in cultivated areas nearby has led to siltation and eutrophication from fertilizer runoff. Although Hinde's Babbler and Martial Eagle are present at the dam, data on their conservation status and population trends remain scanty.

Addressing the conservation challenges facing the KBA requires continuous monitoring, adaptive management strategies, and collaboration among stakeholders, including government agencies, local communities, and environmental organizations. Discussions between Nature Kenya, Kengen and TARDA are ongoing to safeguard the site and its wildlife, and encourage communities living adjacent to the reservoir to appreciate the KBA's ecosystem services. Like Masinga, six other dams along the Tana River host important biodiversity that needs to be identified, monitored and conserved. 🌿



Kilifi (Clarke's) Weaver female, photo by Adam Scott Kennedy in Dakatcha

## What a Morning! Birding in Dakatcha Woodland KBA in June

By Fleur Ng'weno and Adam Scott Kennedy

Clarke's Weaver, *Ploceus golandi*, also called Kilifi Weaver because it's only found in Kilifi County, had not been seen – or at least reported – in 2023. On the Global Big Day of birding in May, it was missing both in Arabuko-Sokoke Forest and Dakatcha Woodland. After five seasons of drought, we feared the worst.

Then on June 14th at the Kibaoni Nature Reserve near Marafa, Maxwell Issa, a bird guide from Dakatcha Woodland Conservation Group, Edwin Utumbi of Nature Kenya, and Japhet Masha of Kibaoni, finally saw a flock of Clarke's Weavers, males and females! The next day, Maxwell Issa and Julio Mwambire found more Kilifi Weavers in the nearby Munyenzani wetland, also called Bore wetland.

### Adam Scott Kennedy picks up the story:

I heard the news from James Apollon on Thursday morning and immediately booked my flights! I flew into Malindi on Friday afternoon, met with Apollon then drove straight to Marafa where we spent the night. Next morning, around 5am, Julio and Maxwell took us to the wetland site. First weaver flies by at around 6am, and our small group located at least 25 weavers at the wetland before 9am.

At the same site, at least 10 Madagascar Pond Herons (it has been a long time since a double-figure site count of this endangered species was last recorded in Kenya), a Dwarf Bittern, a busy pair of Little Bitterns flying back and forth, several vocal and reed-jumping Allen's Gallinule, and healthy numbers of confiding Red-headed Quelea with recently fledged young. Then the heavens gifted us 4 Mascarene Martins – vagrants from Madagascar – circling over the swamp! Unbelievable.

Around 9am we moved from the wetland to the woodland at the Nature Kenya Kibaoni Nature Reserve, where we observed another c.25 Kilifi Weavers, plus both coastal helmetshrikes and a Mombasa Woodpecker. All this before lunchtime - a truly remarkable morning. 🌿

For updates visit  
[www.naturekenya.org](http://www.naturekenya.org)

### EDITORIAL TEAM

Fleur Ng'weno, Angela Mecha,  
Richard Kipngeno and John  
Mwacharo

### LAYOUT

John Mwacharo

### FRONT BANNER

Peter Usher



Nature-Kenya



@Nature\_Kenya



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For contributions, advertising and subscriptions, contact us by:

Post: P. O. Box 44486 GPO, Nairobi

Telephone: 020 3537568/0780149200/0751624312/ 0771343138

Email: [office@naturekenya.org](mailto:office@naturekenya.org)

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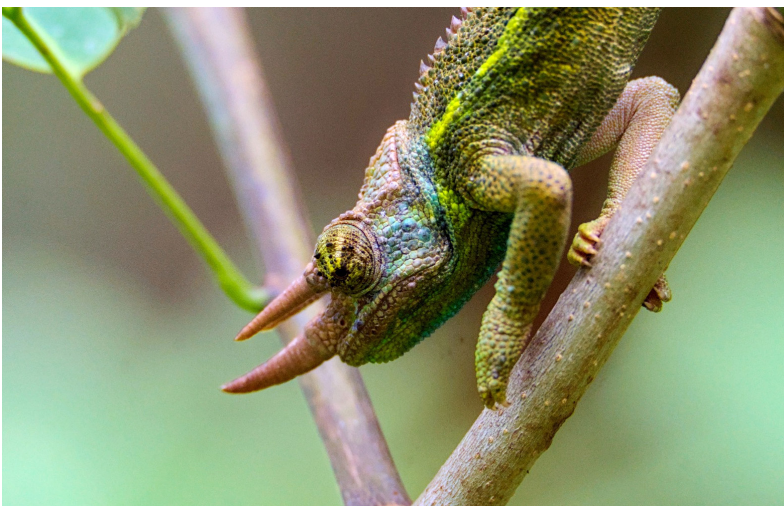
## Out & About



Kilifi (Clarke's) Weaver male. Photo by Adam Scott Kennedy in Dakatcha



A Diadem or Danaid eggfly female on a flower. Photo by Chintan Gohel in Nairobi



Jackson's (Three-horned) chameleon. Photo by Chintan Gohel in Nairobi

## Venus, Mars, Mercury and the star Regulus

By Fleur Ng'weno

### Planets July '23

Venus is the bright light in the western sky at sunset. On July 1st, it appears close to Mars, a much fainter, reddish light. Venus and Mars remain close during most of July. From mid-month, tiny, bright Mercury is in the mix, rising rapidly as Venus sinks. The star Regulus – bright heart of the constellation Leo the Lion – seems to join them throughout the month, first near Mars, then near Venus, finally near Mercury. The slim crescent moon completes the picture, near Mercury on July 19, near Venus on the 20th and near Mars on the 21st.

Golden Saturn and bright Jupiter rise in the east during the night and seem to move across the sky with the stars. (In fact, it is our Earth that rotates towards the east.) At dawn, Saturn is high in the west, Jupiter high in the east. The waning moon is near Saturn on July 7, and near Jupiter on July 11 and 12.

### July stars

In the north, the star Arcturus is a sparkling, golden-orange light. Below Arcturus is the constellation of the Plough or Big Dipper. Look for a line of three bright stars, with four stars forming a box shape at the end – like a big spoon. The blue-white star Spica is high

overhead, appearing near the moon on July 24-25.

The constellation of Scorpius, the Scorpion, rises in the southeast. Three bright stars form the scorpion's claws. Below them is the reddish star Antares, the Scorpion's fiery eye. The moon appears near Antares on the 1st and 28th. Below Antares, a line of stars forms the scorpion's body, like a giant fishhook in the sky. Two stars close together are the sting in the scorpion's tail.

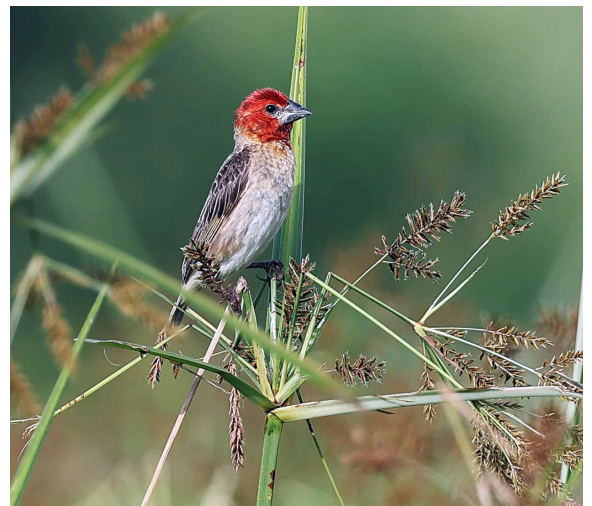
To the right of the Scorpion, in the south, are the two bright stars Alpha and Beta Centauri in the constellation of the Centaur. Next to them, the Southern Cross now leans to the west. (See *June Nature Net*)

### Moon July '23

July 3 – full moon. It's a "supermoon", a little closer and brighter than usual. July 10 – last quarter (half-lit moon overhead at dawn). July 17 – new moon. Look for the crescent moon near the planets on the 19th and 20th. July 25 – first quarter (half-lit moon overhead at sunset).

### July Sun

The Earth's orbit around the sun is not a perfect circle. In July the Earth is a little further from the sun, so it is the cold season near the equator. ☀



Red-headed Quelea. Photo by Adam Scott Kennedy in Dakatcha



## Birding Updates

**Wednesday Morning Birdwalks** in Nairobi

**5th July – Karen Blixen Museum.** Meet at 8.30 am in the Karen Blixen Museum's Car Park area. Directions: Coming from the city centre, take Ngong Road towards Karen. Turn left at Shell Petrol Station onto Karen Road. The Museum is about 1.5Kms after Karen Country Club.

**12th July – Karura Forest.** Meet at the Limuru Road entrance, Gate A, at 8:30 am. We will then proceed to Amani parking. Thanks to Friends of Karura Forest for welcoming the birdwalk.

**19th July – Paradise Lost.** Meet at Paradise Lost Main Gate at 8:30 am. Directions: Take Kiambu Road. Turn Left at Paradise Lost junction in Thindigua after Runda Greens before Quick Mart Supermarket. Turn right at Kencom Apartments just after Kasarini Primary School. It's about 500m to the main gate. Thanks to the management for welcoming the birdwalk.

**26th July – Museum Grounds/ Michuki Memorial Park.** Meet at 8 am in the open space in front of the entrance to the museum galleries.

**16th July. Sunday Bird Watch – Gatamaiyu Forest.** Meet at Total Petrol Station, Kimende, at 8:30am. Directions: Along Nairobi – Naivasha Road, Total Petrol Station is on the left after Great Rift Valley View Point, before Kimende Town. We will take a matatu or drive to Gatamaiyu Centre then walk to the forest. Average fare is **Ksh. 100** to Gatamaiyu Centre. It will be a day trip, bring snacks and water. Thanks to Kijabe Environment Volunteers (KENVO) and Kenya Forest Service (KFS) for welcoming the birdwalk.

If you have questions, please write < news@naturekenya.org > or phone 0780-149200.

**Bird Ringing at Nairobi National Museum** grounds usually takes place once a week, usually on Tuesdays. Please confirm with Titus Imboma <imbomati911@gmail.com> Phone 0721-649452.

**Hamerkop in flight.**  
Photo by Simon Odhiambo

**Thursday Birdwalks** in Malindi

**6th July – Malindi Museum Ground.** Meet at 4:00pm at the Malindi Museum near the Nature Kenya Membership Office.

**13th July – Camp Gedeng.** Meet at 4:00pm at the Malindi Museum near the Nature Kenya Membership Office.

**20th July – Mtangani.** Meet at 4:00 pm at Malindi Museum near the Nature Kenya Membership Office.

**27th July – Mayungu.** Meet at 4:00pm at Malindi Museum near the Nature Kenya Membership Office.

**29th July. Saturday Bird Watch – Malindi Airport.** Meet at 6:30am at the Airport Entrance Gate, by special permission from the Kenya Airports Authority, Malindi – Operations Department and Wildlife Control Section. The bird walk is likely to last 2-3 hours. If you plan to attend, please SEND YOUR NAME and Identification Card (ID) or Passport number to <malindimembers@naturekenya.org > BEFORE July 27. Please also carry your identification with you on Saturday.

For more information, email: <malindimembers@naturekenya.org > or phone 0725 223042.

**Mombasa Birdwalks** are held the 3rd Saturday of each month. To check meeting time and place, check Facebook page:

<<https://www.facebook.com/groups/>



## Tree Walk

By Nature Kenya Plants Committee



**Venue: National Museums of Kenya**  
Meet at Nairobi Museum main gate  
**Date: Friday 28th Jul Time: 9:00 AM**  
**Contact: 0780 149200 or 0726 006283**

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For details on associated groups such as Youth Committee, Succulenta, and Friends of Nairobi Arboretum, City Park or Arabuko-Sokoke Forest, contact [office@naturekenya.org](mailto:office@naturekenya.org)