



Hawaan Forest Conservation Trust

Monthly site inspection report:

Summary:

30.06.2025

1. In June, work by the Hawaan Forest conservation team continued with a focus on fire-preparation (cutting tracerbelts), along with regular reserve duties and progress towards our goals by managing Hawaan-M4 servitude - which includes invasive plant species control, litter control and wildlife management.
2. Approximately 20 mm of rainfall was recorded during June, as such the water-point on the Bushshrike trail recorded upwards of 100 photo's per day – up from roughly 20 visits during summer when there is a lot of moisture around.
3. During this low-resource period in the forest, one key resource — forest fruit — provides a high-energy forage, especially for the red duiker, but most likely also for blue duiker. These forest antelope, unlike the bushbuck which do not specifically browse young plant shoots, rather, they take fallen leaves, fruits, and fungi. The fruit producing trees in the Hawaan forest at this time of year are therefore a key-resource and include the Thorny Elm, Dwarf Loquat, Cat Thorn, Monkey Orange, and Duikerberry.
4. Planned actions for July 2025 include finalising fire preparation, continued cleaning up the M4 road reserve, the annual cataloging of camera trap images and deployment of passive acoustic monitor across the transects for the annual winter sample.



Figure 1. Numbers on the map refer to items below.



(2)



The Project Life Plan Malaise-Trap data contained the winter subsection of insects which is collected weekly by eThekwin technicians.

The management zones and housekeeping thereof remain clean and well-managed during June.

(3)



(4)



The forest pipeline servitude was mowed and neat throughout June. These open-space areas in the forest provide sunspots gaps where during mid-morning's - the last of the autumn butterflies such as the Golden Piper, White Pearl Emperor and Whites can be seen.

A south-easterly gale wipped through the forest in during mid-June – and although there was nothing major tree falls to report on - what did fall on the trails has now been cleaned up by HCT staff.

(5)



(6)



The WESSA trail network has been raked twice this month because of the wind.

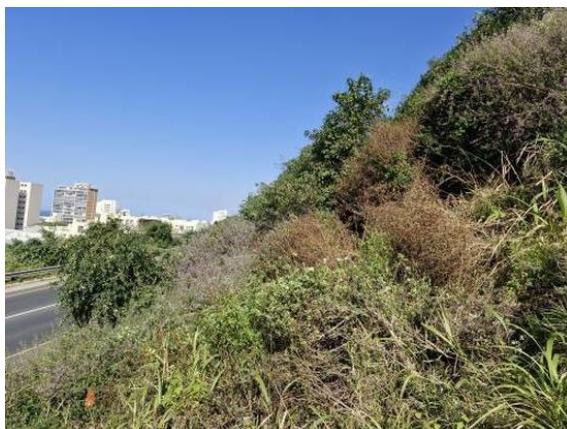
On the eastern boundary of the reserve. The WESSA team continues to work through the Chromolaena, Yellow-bells and Mexican Sunflower invasion sites along the M4.



Also, along the M4 a couple of Maderia Vine hotspots have been identified and programmed for removal.



The cropped Mexican Sunflower on M4 has now been spot-sprayed by the WESSA conservation team.



Clearing and maintenance of the rehab area at Herald Drive were also completed in June.



An inspection of the rehabilitation area revealed this work is holding steady; no observable signs of habitat degradation or erosion on this area.



In an effort to monitor arboreal forest rodents such as the enigmatic Woodland Dormouse, we have set up a camera trap in the large *Ficus burke*. Although the tiny fella's may be in winter torpor at this time...



In preparation for the prescribed burning in August, tracer belts have begun to be cut in the western section of the grassland.

(13)



(14)



Winter is the low-resource time of the year in coastal forests, so fruiting resources are in high demand. One species that is abundant in the forest is the Thorny Elm, *Chaetachme aristata*. These fruits will be eaten by both forest frugivore birds and the local red Duiker

(15)



(16)



While on the forest edges and tangled among the canopy, other winter-fruiting resources are available — notably *Scutia myrtina* (Cat's Claw).

And the most beautiful local forest cucumber, *Coccinia palmata*, which will grow, fruit, and die within a season or two. Though we not clear if the fruit of this species is utilised by wildlife or not?

(17)



In the low-rainfall months between June and August, the camera at the Bushshrike water point pick up roughly 100 images per day, including frequent daily activity by bushbuck

(18)



Unlike impala, bushbuck are not gregarious antelope — though these females seem to have teamed up during the winter months for the moment.

(19)



Using the water point during July were only one or two visits by Banded Mongoose.

(20)



The local Large spotted Genet.

(21)

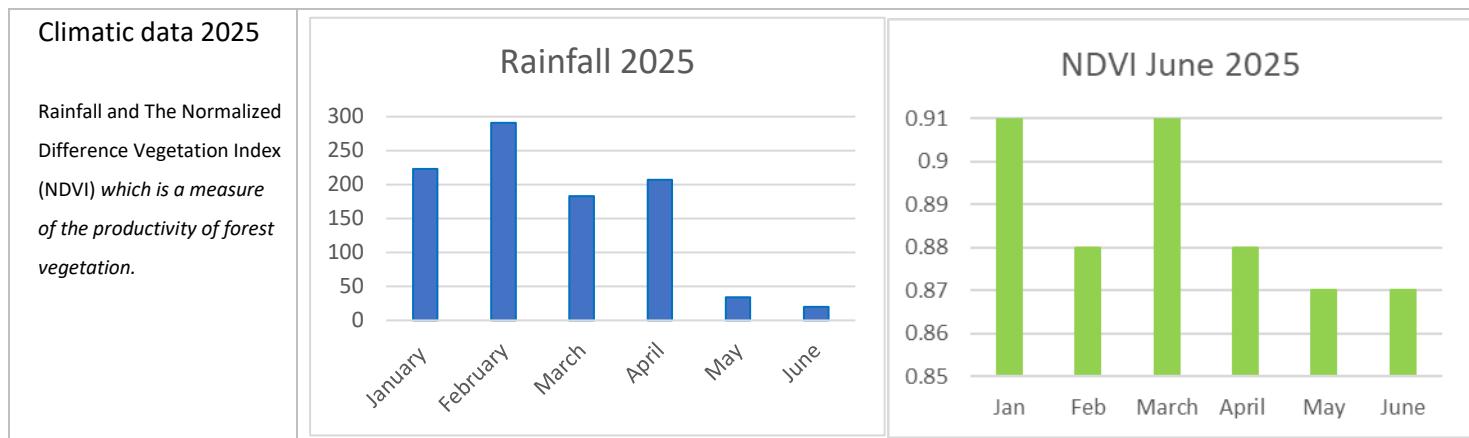


Red duiker visit the water point even though they may not actually need to, being territorial forest antelope that do not rely on surface water.

(22)



This purple-crested Turaco was the most colorful of the handful of bird species that utilise the water point on the forest edge.



Herbicide Register – Hawaan Forest – 2024/2025

Item	Herbicide Name	Active Ingredient	Type	Litres in Stock	Date Used	Species Applied	Location
1	Gladiator, pre-mix	Picloram	Selective	15L (pre-mix)	16/4/22	Stickyweed	Forest mgmt zone
2	Round-up	Glyphosate	Non-selective	3L	-	-	-
3	Gladiator, premix	Picloram	Selective	Used 15L	15/11/22	Brazilian pepper	Eastern grassland
4	Plenum 160	Picloram	Selective	20L – concentrate. Mixed 21L	25/02/23	Brazilian pepper, Yellow bells	Eastern gra
5	Plenum	Picloram	Selective	18L	13/04	Pepper, Yellow bells	West grassland
6	Plenum	Picloram	Selective	5L	05/09	Yellow bells, Pepper	West grassland
7	Plenum	Picloram	Selective	5L	05/03/24	Searsia	East grassland
8	Plenum	Picloram	Selective	3L	05/08/24	Searsia, Dodda, Euclea	East grassland
9	Plenum	Picloram	Selective	3L	11/08/24	Searsia, Dodda , Euclea	Central grassland
10	Plenum	Picloram	Selective	2l	31/08/24	Searsia	Eastern grassland
11	Plenum	Picloram	Selective	2l	31/10/24	Searsia	Eastern grassland
12	Plenum	Picloram	Selective	2l	5/2/2025	Bush Encroachment	Western Grassland
13	Plenum	Picloram	Selective	2L	12/2/2025	Trails/Sticky weed	Trails
14	Plenum	Picloram	Selective	2l	20/03/205	Searsia/Bush encroachment	Western grassland
15	Plenum	Picloram	Selective	2l	1/04/2025	Searsia/Bush encroachment	Western grassland
16	Plenum	Picloram	Selective	1.95	30/06/2025	Mexican Sunflower	Eastern Grassland

(25)



(26)



HAW01

05/12/2025 00:52:23

PIR Trigger 15 17

The pair of water mongooses are a monthly feature on the grassland trails but come out late at night foraging.

HAW 008

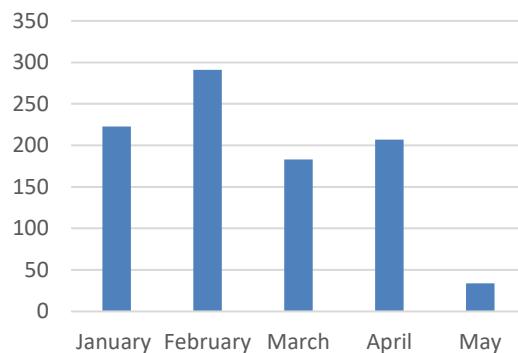
2025/05/06 07:07:13

PIR Trigger 109 17°C 63°F 10

While foraging in the early morning, this Red duiker brings contrast and reminds us all of our collective responsibility to maintain and protect urban forest systems.

Climatic Data – May 2025

Rainfall



NDVI 2025



Herbicide Register – Hawaan Forest – 2024/2025

Item	Herbicide Name	Active Ingredient	Type	Litres in Stock	Date Used	Species Applied	Location
1	Gladiator, pre-mix	Picloram	Selective	15L (pre-mix)	16/4/22	Creeping inch	Forest mgmt zone
2	Round-up	Glyphosate	Non-selective	3L	-	-	-
3	Gladiator, premix	Picloram	Selective	Used 15L	15/11/22	Brazilian pepper	Eastern grassland
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13	Plenum	Picloram	Selective	2L	12/2/2025	Trails/Sacky weed	Trails
14	Plenum	Picloram	Selective	2L	20/03/205	Searsia/Bush encroachment	Western grassland
15	Plenum	Picloram	Selective	2L	1/04/2025	Searsia/Bush encroachment	Western grassland
16	Plenum	Picloram	Selective	1L	12/05/2025	Tithonia/Chromolaena	M4 edges

(21)



During our investigation of suspected Bush Pig activity in March, we relocated the camera traps to monitor the western portion of the grassland trails. This adjustment allowed us to capture some excellent observations of the local scrub hare.

(23)



Also observed at the Bush-Shrike water hole was the resident Crowned Eagle, which we haven't seen regularly in a few seasons.

(22)



Observed by the camera at the enjoying the water at the Bush-Shrike water-hole were the local Wood Owl.

(24)

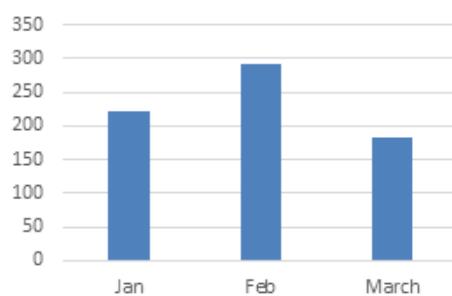


The resident water mongoose is frequently observed along the trails in Hawaan, making regular appearances during our monitoring efforts.

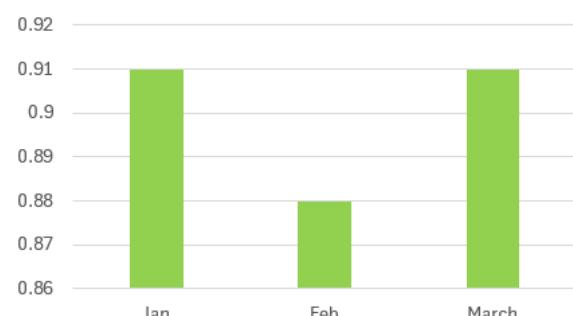
Climatic Data 2025

Rainfall and The Normalized Difference Vegetation Index (NDVI)
which is a measure of the productivity of forest vegetation.

Rainfall 2025



NDVI 2025





Hawaan Forest Slip_2025

- Hawaan Grassland
- Contours_north coast
- Hawaan_slip
- Hawaan_boundary

Google



0 100 200 m



Hawaan Forest Slip Strike – March 2025

A significant slip has occurred on the southern bank of the Ohlanga River in March 2025. This slip, resulting from the combined effects of over 600 mm of rainfall during January, February, and March 2025, along with ongoing undercutting by Ohlanga River, has led to the loss of approximately 4,000 m² of forest habitat.

Aerial imagery and reports dating back to the flooding in 1986 indicate that this is a long-term feature of the river channel. The river is forced to meander southward due to a large sandbank and reedbed located directly adjacent to the slip. The ecological habitat loss includes several medium-sized tree species, such as the Red Coastal Milkwood (*Mimusops obovata*), Stem-Fruit Iron Plum (*Drypetes natalensis*), and Blue Berry (*Strychnos usambarensis*).

The parent soil material at the slip site consists of regic sands, which have deposited approximately 200–300 m³ of material at the foot of the slope, which has a gradient of roughly 1:3.

There appear to be two possible outcomes:

1. The material at the foot of the slope remains in place and is not removed by the Ohlanga River, allowing emergent wetland and forest vegetation to colonise the area, thus stabilising the bank.
2. The river continues to undercut the slope, resulting in further slipping and erosion.

At present, there is an estimated 1–2 m vertical drop from the forest edge to the slip. It is anticipated that further rainfall and erosion will continue to shift this area until the level change aligns with the forest plateau, which lies approximately 20 m from the edge of the slip and drop-off.

For safety reasons, the area has been closed to the public and estate residents.



(17)



(18)



Scrub Hares were noted on the grassland trails near the big Fig Tree during February. This was first time we have captured them on camera.

(19)



(20)



The usual Wood Owl was noted at the Bushshrike waterpoint in February

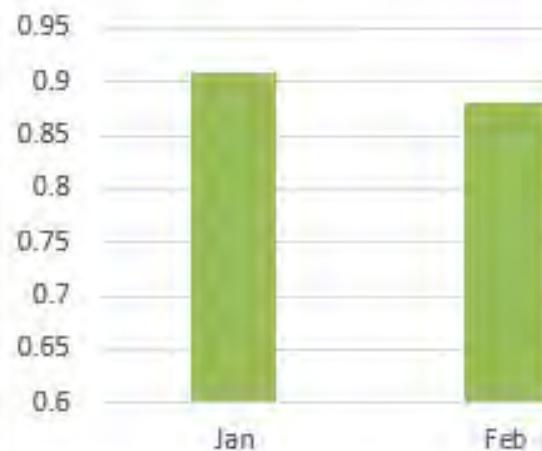
It appears that a little Sparrow-Hawk was enjoying the freshwater provided by HCT at the Bushshrike waterpoint.

Climatic Data 2025

Rainfall 2025



NDVI



(29)



Crested Guinea fowls are a typical feature in the forest understory at Hawaan.

(31)



The Crowned Eagles have bred and fledged in 2024, it has been more than 12 months since a juvenile has been noted on the camera's.

(30)



The usual pair of Water mongoose captured in January 2024.

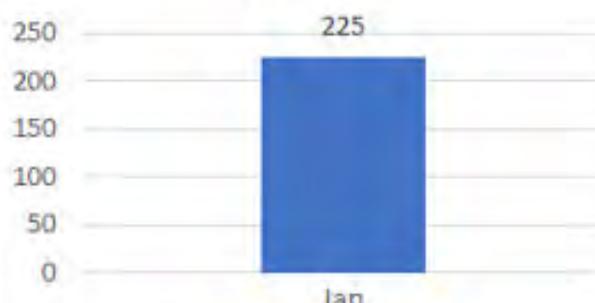
(32)



The usual Genet was also spotted by the cameras during late December in 2024.

Climatic Data January 2025

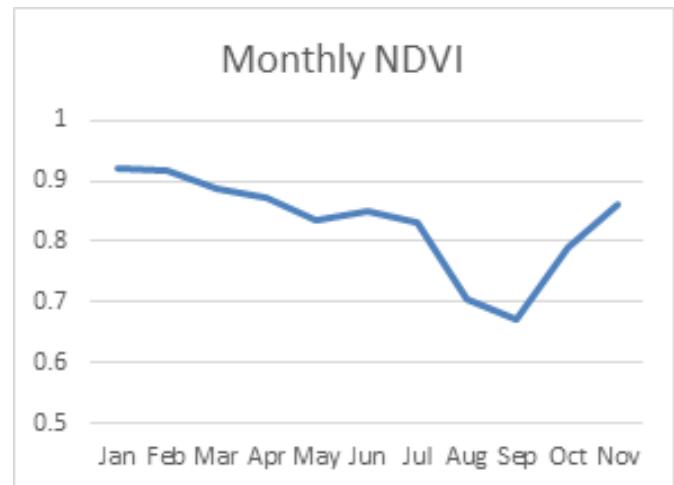
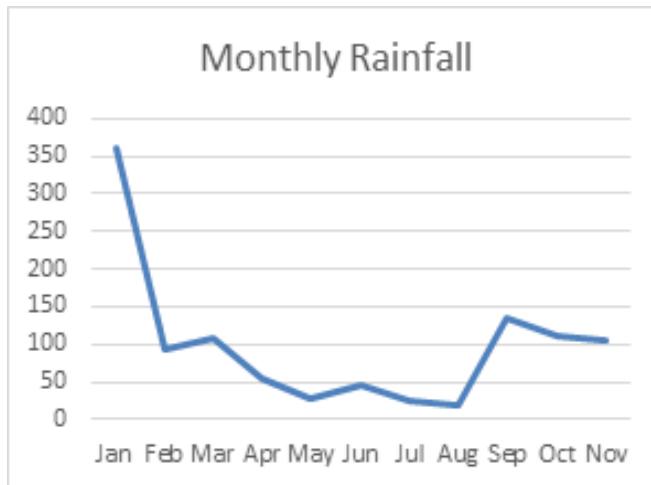
Rainfall



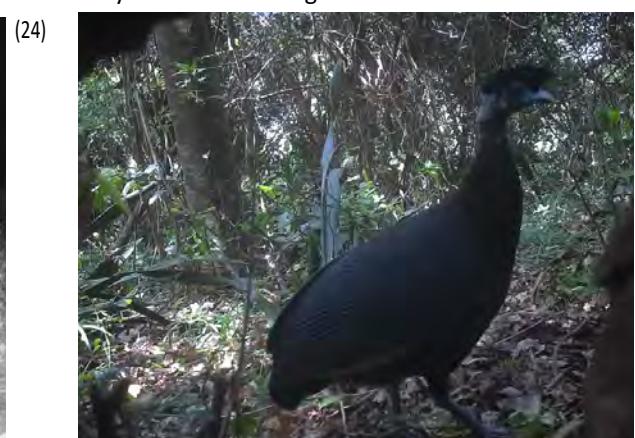
NDVI

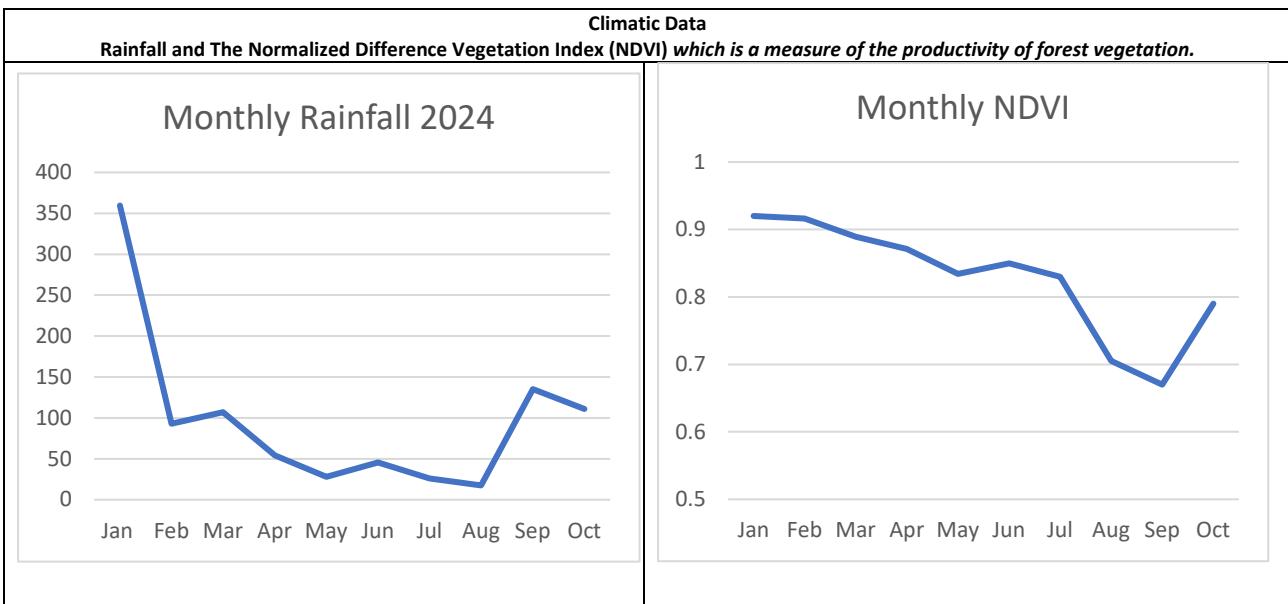


Climatic data for November, 2024.



Camera trap highlights from November 2024, aligning with the pattern of increasing observations within the interior of the forest – though the water-points are still being utilised a diversity of animals

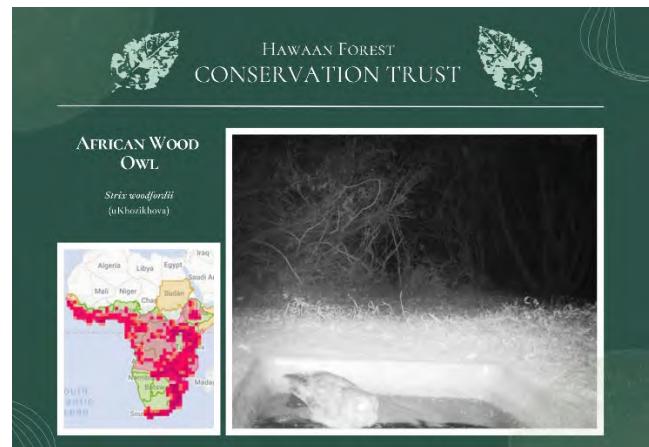
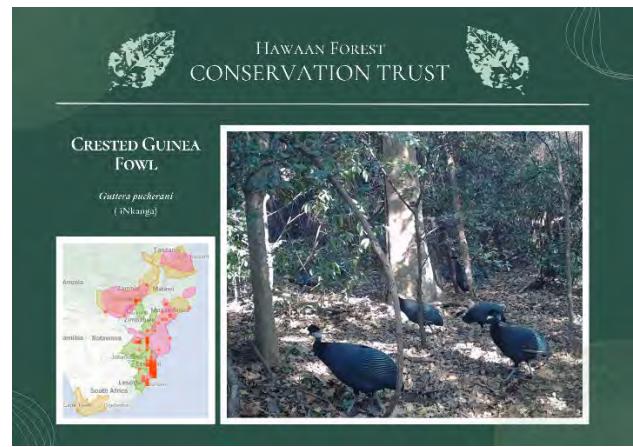
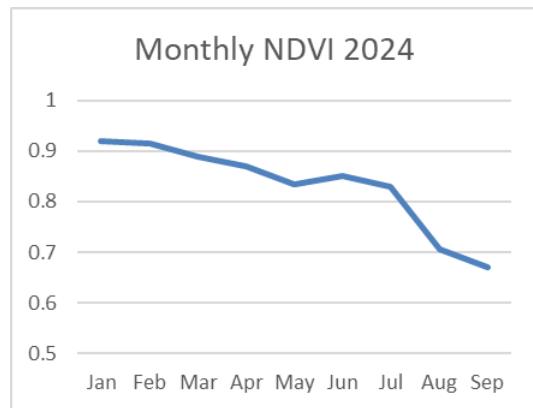
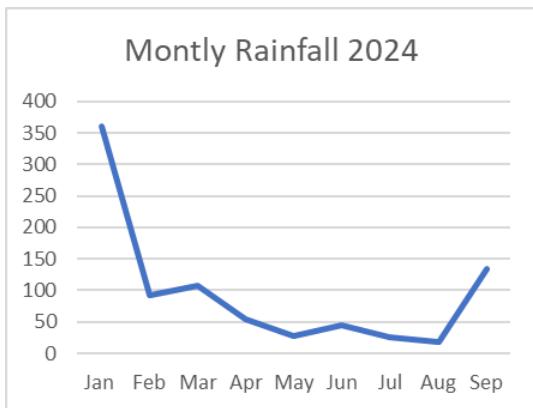




The camera trap images from October 2024 reflect the clearing humidity and the greening up of the forest, which has been occurring since the beginning of September. This change lends a mystical quality to the forest at this time of year.



Climatic Data for September 2024

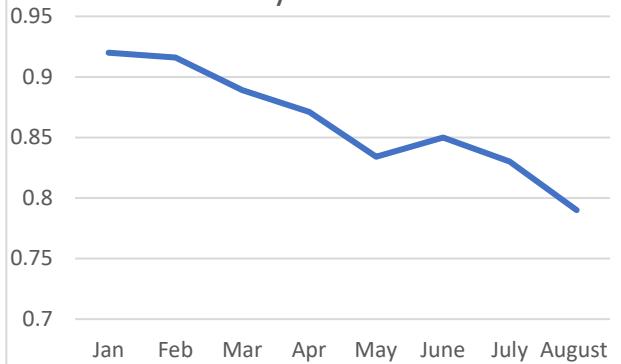


Climatic data (August 2024)

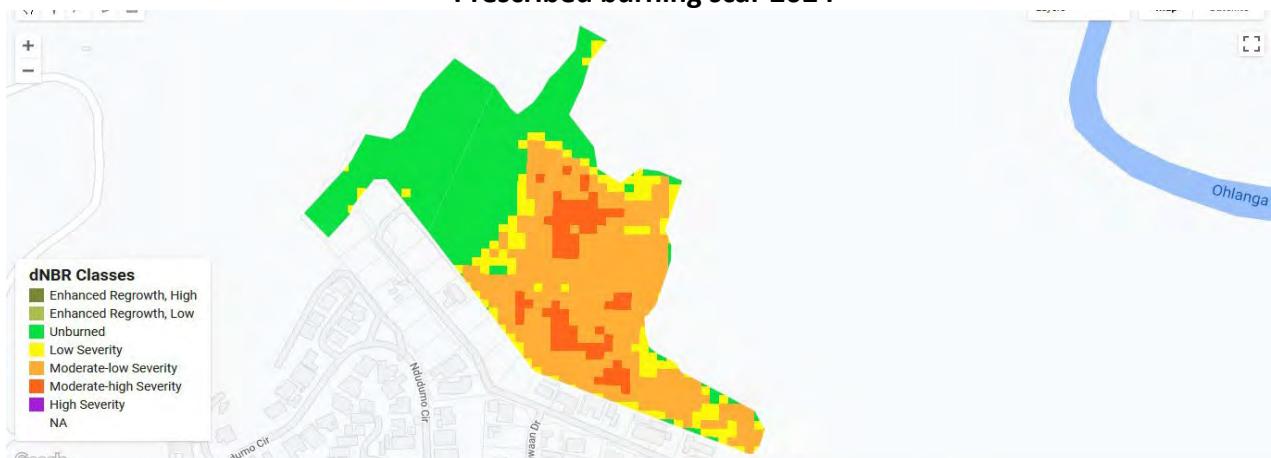
Monthly Rainfall 2024



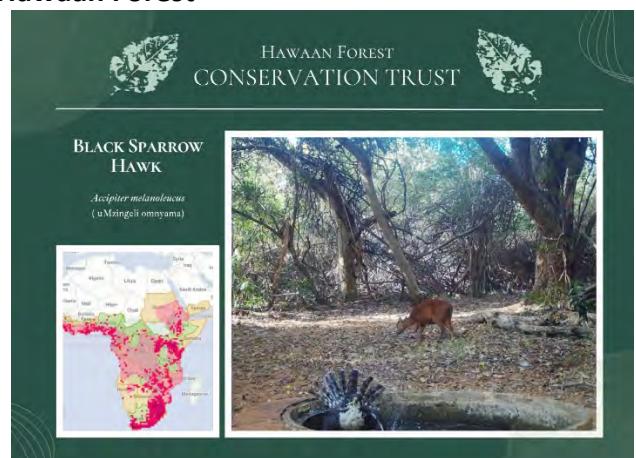
Monthly NDVI 2024

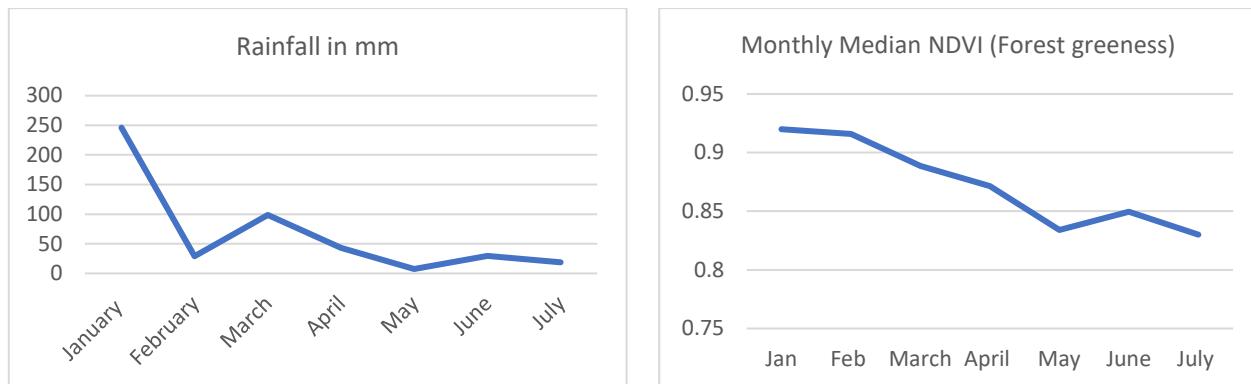


Prescribed burning scar 2024



Avifauna of the Hawaan Forest





Antelope of the Hawaan Forest



**Hawaan Forest
CONSERVATION TRUST**



**Hawaan Forest
CONSERVATION TRUST**

RED DUIKER
(FEMALE)
Cephalophus natalensis
(Sikhipha)




RED FOREST DUIKER
(MALE)
Cephalophus natalensis
(Sikhipha)




BUSH BUCK
(FEMALE)
Tragelaphus scriptus
(Intakajolwanemnyama)




BUSH BUCK
(MALE)
Tragelaphus scriptus
(Intakajolwanemnyama)

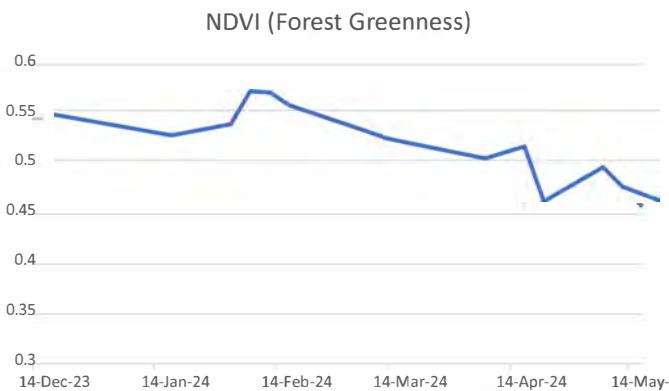



BLUE DUIKER
(FEMALE & FAWN)
Philantomba monticola
(Nkonkon)




BLUE DUIKER
(MALE)
Philantomba monticola
(Nkonkon)



Normalised differentiated vegetation index, on a scale from 0-1, is a satellite derived metric used to monitor vegetation health and primary productivity. This can be tracked on a monthly bases through the growing season, where it can be noted that mean NDVI at the Hawaan peaked in Mid-February at 0.58 and dropped to 0.45 during late May,



Male Bushbuck



Female Bushbuck



Blue Duiker - Male



Lemon Dove



Red Duiker - Male



Banded Mongoose



Vervet Monkey

Camera Trap imagery from April 2024



Vervet monkeys have been enjoying the fresh water provided HCT at the Bushshrike water point



As have many of the Red Duiker



The large male bush-buck



and the beautiful female bush-buck, all look in fine condition.



Two beautiful forest doves, the rarer forest, Lemon Dove..



and the more common, more often associated with woodlands, Tambourine Dove, were captured on the camera during April

Observations from the camera traps in February showed the usual allotment of animals using the water provided by the HCT staff to bathe and drink. We are working towards formalising the logging of this data on a consistent basis so that it can be used as baseline information for the forest and to track change.



Spotted Genet



Tambourine Done



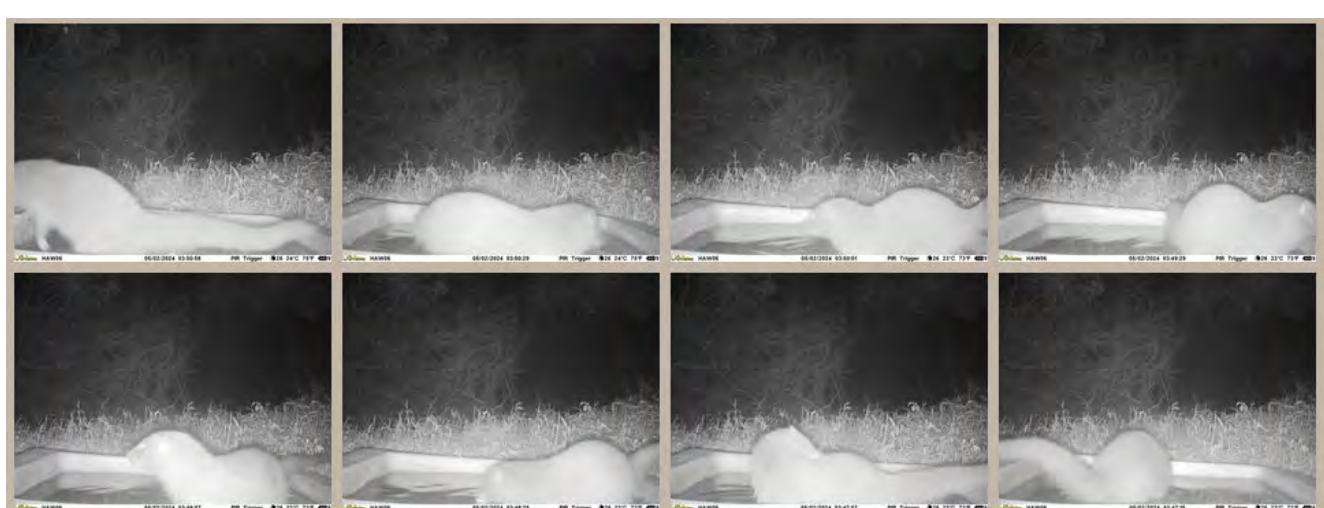
Red Duiker



Blue Duiker



Spotted Eagle Owl



Water Mongoose

Camera Trap highlights from November 2023. Hawaan Forest.



Large Spotted Genet



Female Bushbuck



Red Capped Robin Chat



Pair of Red Duikers



Purple crested turaco

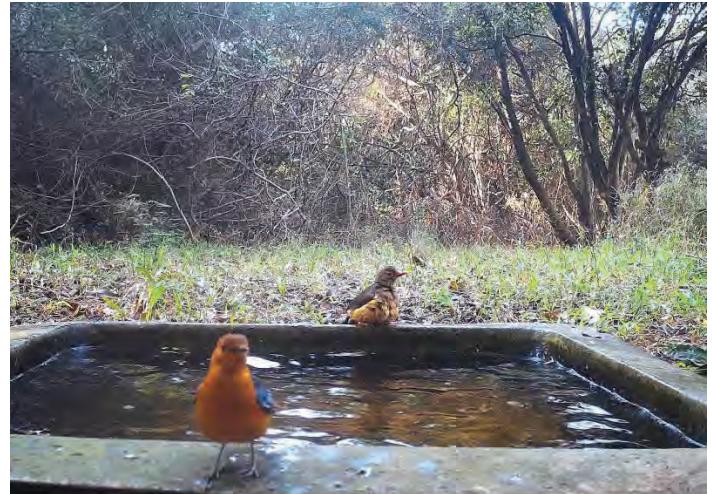


Tambourine dove

The forest fauna have been out in full force during August and the action has clearly revolved around the water point at the entrance to the Bush Shrike trail. One again some beautiful forest images have been captured.



A lemon dove and male blue duiker



A Red capped robin chat with a Olive thrush



Juvenile crowned eagle



A family of bushbuck



Large spotted Genet



Dwarf mongoose

Some beautiful camera trap images were taken at the forest water point during July, 2022.



Red Duiker, female.



Bushbuck females.



Crested guinea fowl.



Red Duiker, male



Vervet Monkey, Banded Mongoose, and Guinea fowl.



Banded Mongoose.

Some beautiful camera trap images were taken within the dry forest interior during June.



Bush buck female)



Bush buck (male)



Bush buck (female)



Red duiker (female)



Bush buck (female)



Blue duiker (pair)

Camera Trap imagery from March 2024



The have been some great mixed foraging parties captured on the camera's during March. Here, Crested Guinea fowls and Red Duiker.



On the Bush-Shrike trail, Crested Guinea fowl and Bush Buck.



The recent hot weather has prompted a diverse array animals captured at the water-hole on the Bush-shrike trail. Such as the Crowned eagle drinking at the water-hole.



A family of Purple Crested Turaco's.



A nice large Bushbuck passing by the water-hole on the Bush Shrike trail.



A small, blue Duiker close up at the water-hole.

The Polyphagous Shot Hole Borer (PHSB) is an ambrosia beetle native to Southeast Asia. In 2017 this pest was detected on London

Plane trees in the KwaZulu-Natal National Botanical Gardens, Pietermaritzburg. Its presence has since been confirmed in multiple

locations in eight provinces in South Africa. The beetle has a symbiotic relationship with the fungus *Fusarium euwallaceae*, which serves as a food source for the adults and their larvae. In susceptible trees the fungus causes a disease called Fusarium dieback, which can

lead to dying branches and tree death. The beetles attack a wide range of exotic and indigenous trees in urban, agricultural and natural landscapes.



1 mm

Photo: S. Bush



Above: An adult female is 1.8-2.6mm long. Males are

smaller and cannot fly.

PSHB is not able to complete its life cycle on all the tree species it attacks. Trees in which the beetle is able to breed and multiply are referred to as '**reproductive host trees**'. Important reproductive hosts include species of oaks, maples, willows and coral trees, avocado and castor bean. '**Non-reproductive host trees**' are attacked by the beetle, but the beetles do not establish galleries (tunnels) or breed. The fungus may, or may not cause disease. Trees are generally not expected to die. An updated list of confirmed hosts in South Africa can be viewed at www.fabinet.up.ac.za/pshb/

The movement of infested wood is an important means of spread of the beetle. Therefore, appropriate disposal of infested trees (by chipping/composting, solarization or burning) will be key to reducing the spread of this damaging pest. Surveys to monitor the spread of the beetle in South Africa are continuing. The public can assist by looking out for symptoms. Suspected instances can be reported to pshb@fabi.up.ac.za

Left: Chinese maple tree killed by PSHB and its fungus



Reproductive galleries in pecan



PSHB galleries in coral tree



Shot gun-like symptoms on London Plane

Compiled by Z.W. de Beer & T. Paap (Version 2021-03-04) www.fabinet.up.ac.za/pshb

