















Tsavo Trust film clip: <https://www.youtube.com/watch?v=qGgM6-ggZOE&t=270s>

WILDLIFE CONSERVATION PROGRAM: Big Tusker Project – Aerial & Ground Activities		
Activity	Hours Flown	Kilometers Covered
 Aerial Reconnaissance	37 (781 for year) Average 111km p/h of low-level flight	4,150 (86,129km for year) Flights carried out jointly with KWS staff
 Rhino specific flights	16 (239 for year)	1,797 (27,432km for year)
	Field Patrol Days	Kilometers Covered
Ground Activities (Joint KWS / TT)	Protection teams: 144 days (1,720 to date) Monitoring teams: 55 days (643 to date)	Vehicle patrols: 12,250km (139,694km to date) Foot patrols: 952km (9,595km to date) Monitoring teams: 7,209km (85,384km to date)
 Big “Tuskers” observed	10 Tuskers - 4 Super Tusker bulls, 5 emerging bulls, 1 cow Tusker = 16 individual observations	
Ivory recovered	25 elephant tusks (82 for year to date) (Heaviest recvd.: L=105lbs (47.5kg & R=117lbs (53kg))	
Elephant mortality	Fresh (less than 3 weeks old)	Recent (less than 3 months old)
	12 – (c of d: 11 natural-drought; 1 unknown)	3 - (c of d: all natural)
Poacher camps/hides	Fresh - 1	Recent – Nil
Arrests	14 – by KWS / TT – 1 bushmeat poacher; 13 illegal cattle herders (120 for year to date); Bushmeat recvd (wet & dried): 430kg (1,158kg for year to date)	
Snares/traps recovered	20 by Tembo Teams: 1,233 snares to date 2021 (855 small; 279 medium, 99 large)	
Human Elephant Conflict	Joint TT-KWS team: 14 elephants driven from farmlands east of Mtito Andei (1,693 elephants pushed out of farms in 2021 to date – ave. 4.5 per night)	
Illegal Livestock (only in PA)	13 live cattle bomas (3,200 cows; 600 shoats; 47 men)	
Written reports to KWS	50 (daily Situation reports, various communications & 1 monthly report)	
Significant notes	<ul style="list-style-type: none"> 14/12/21: Super Tusker “Wide Satao” sadly died, naturally (ivory weight: L-105 & R-117lbs) Finally good rains fell in mid to late Dec21 relieving drought stress in TCA Dec21: Construction of 2 sand dams in TWNP – IPZ completed Dec21 Renovation of KWS old Chyulu Gate as permanent ranger outpost in TWNP - IPZ 	
COMMUNITY CONSERVANCY PROGRAM:		
Kamungi Conservancy North boundary TWNP 	<ul style="list-style-type: none"> Employment (through T/Trust): 36 permanent, 15 temporaries Membership: 1,400 people Community Mobilization meetings: 10 Ongoing Projects: Water project; 10% fence plan; VSLA’s; HEC-Mtito fence; Dispensary support; Permaculture Project; SAPA workshops & trainings Human Wildlife Conflict (HWC): 48 reports; crop raiding elephants & lion predation issues Security Ops (KWS, T3 & KS): 	
Shirango Conservancy Southeast boundary TENP 	<ul style="list-style-type: none"> Employment (through T/Trust): 14 permanents Membership: 2,300 people Community Mobilization meetings: 3 Ongoing Projects: Water project; anti-poaching; land tenure Human Wildlife Conflict (HWC): 16 reports elephant & livestock predations Security Ops (KWS T1, T7 & SS): 	
FORMAL FIELD CONSERVATION PARTNERS: (Full list of supporters/partners shown on last page)		
  	 	   

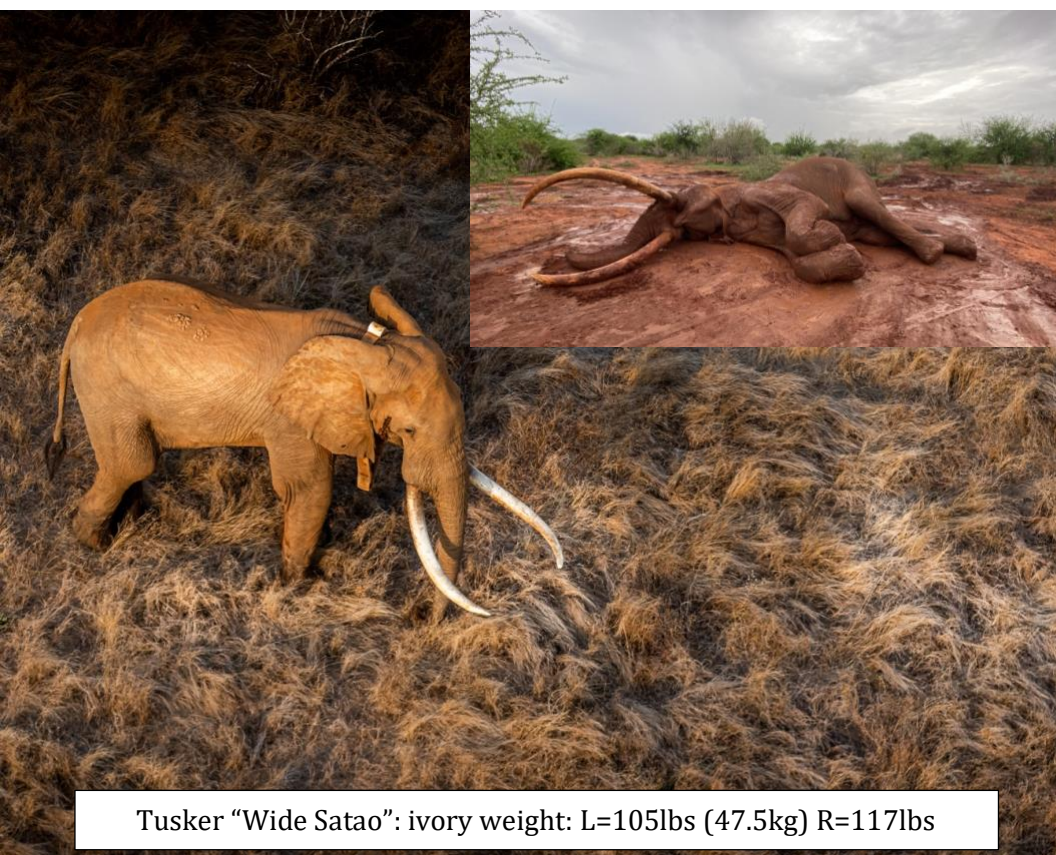
WILDLIFE CONSERVATION PROGRAM:



“Big Tusker Project”- aerial and ground mobile teams:

Table 1: Summary of Big Tusker Project (BTP)

Activity / Detail	Number & Brief Remarks
<i>BTP individual Tusker sightings</i>	Total = 16 sightings
<i>Super Tusker Bulls</i>	4 individuals (9 sightings)
<i>Emerging Tuskers (bulls)</i>	5 individuals (5 sightings)
<i>Iconic Cow Tuskers</i>	1 individual (2 sighting)
<i>Elephant Mortality</i>	15: - 12 fresh (c of d: 11 natural, 1 unknown; 3 recent – natural)
<i>Ivory Recovered</i>	25 tusks (from carcass recovery)
<i>Elephant Treatment/Translocation</i>	1 Joint KWS/TT/SWT teams attempted to get Super Tusker <i>Wide Satao</i> back to his feet after he collapsed, but all attempts failed sadly on 13/12/21, Kulalu
<i>Wildlife Rescues (mainly venomous reptiles)</i>	7: 1 baby elephant rescued (taken by SWT); 6 snakes: 1 Puff-adder; 3 Red spitting cobra; 1 African rock python; 1 speckled sand snake
<i>Rhino Aerial Patrol Support (KWS / ZSL / TT partnership)</i>	6 rhino specific reces: 1,797km flown = 16hrs (4 TW & 2 TE)
<i>HWC cases attended to</i>	5 (14 elephants, 1 buffalo driven - community farms east of Mtito Andei)
<i>Arrests</i>	14 (1 bushmeat poacher; 13 illegal cattle herders)
<i>Wire Snares Recovered</i>	20 (11 small, 9 medium)
<i>Bush Meat Recovered (Kg)</i>	430kg (1 eland; 1 l/kudu; 1 impala & 2 dried Dik-dik,)
<i>Poachers Equip. Recovered</i>	2 pangas; 1 bicycles; 2 lamping torches; 2 sirens, 1 motorbike, cooking equip
<i>Poachers' camps/Blinds</i>	1 active
<i>Night Ambushes set</i>	4 (4 Kulalu/Shirango/Dakota-Voi River/Morondo)
<i>Response to Armed Situations</i>	Nil
<i>Foot patrols (km) Tembo Teams</i>	952km foot patrols – 6 teams
<i>Collared Elephant Observations</i>	2 sighting record forms submitted to STE (joint KWS/TT teams)
<i>High Value Wildlife Monitoring</i>	Ongoing partner to KWS TCA Research (Hirola, Grevy's zebra, carnivores)
<i>Firefighting cases</i>	Nil
<i>Illegal Cattle Drive KWS Support</i>	9 TWNP - Ziwani/Manda/Losoito; TENP - Ndara
<i>Charcoal & Logging</i>	Nil
<i>Training</i>	2 TT Officers Masters training; aircraft training; HWC community training; Maliasili – African Conservation Leadership Course
<i>TT HQ Rainfall</i>	201 mm. Total rainfall to date for 2022: 478mm



Tusker “Wide Satao”: ivory weight: L=105lbs (47.5kg) R=117lbs

Main photo shows late Super Tusker known as “Wide Satao” (August 2020), who sadly died naturally on the night of 13th December 2021 just outside TENP (insert).

Through the Big Tusker Project, administered jointly by Tsavo Trust and KWS, we had come to know Wide Satao very well, having first been named a Tusker in August 2013. Since then, he has been observed 376 times, an average of once every week over the last 9 years. This consistent monitoring certainly helped to ensure he lived to an old age and died naturally.

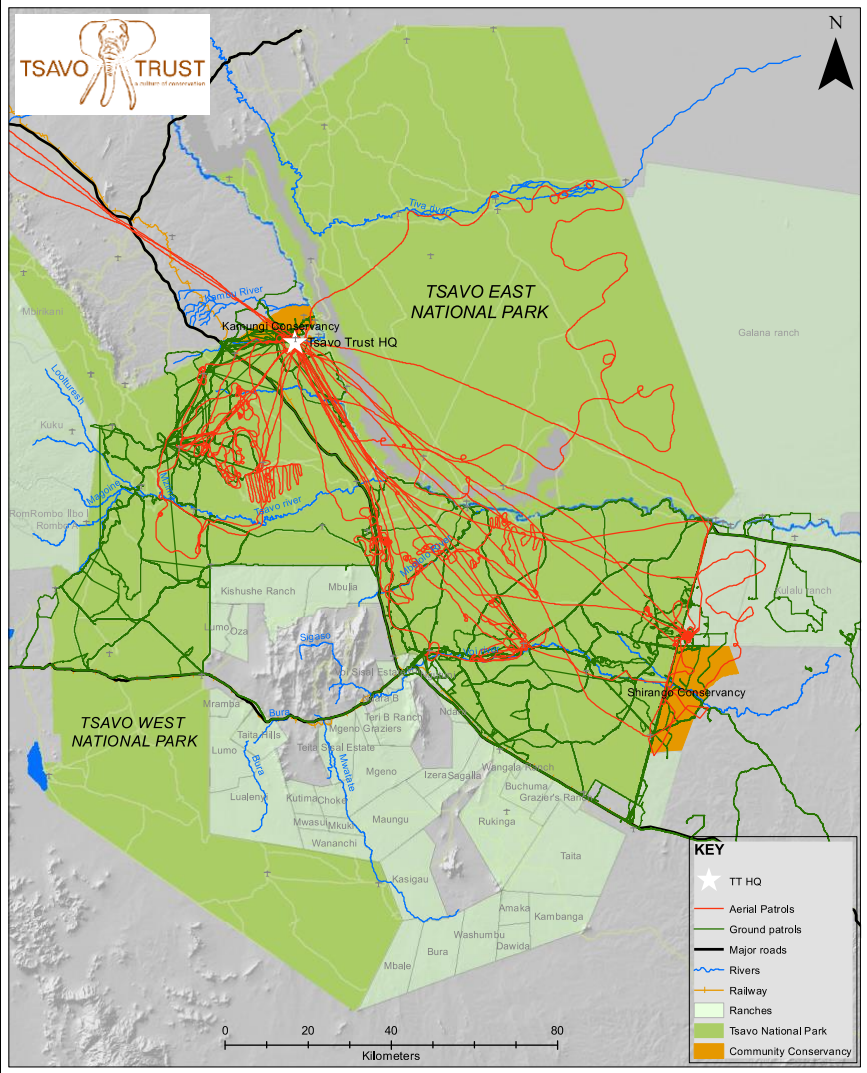
Save The Elephants (STE) played a key partnership role also, given he was the only collared Super Tusker in Tsavo.



Aerial Reconnaissance and Ground Patrols - Areas Covered:

- Aerial patrolling is a vital conservation tool providing “*eyes in the skies*” and directional guidance to ground units who provide “*eyes and ears*” on the ground. The combination of both is effective.
- All flight paths and ground patrols are carried out jointly - KWS/TT and recorded with all relevant real-time observations relayed to KWS daily for rapid actions and for their records.

TSAVO TRUST'S AERIAL AND GROUND PATROLS COVERAGE
December, 2021.



*Map shows Tsavo Trust's flight paths in **RED** and ground patrol paths in **GREEN** over the TCA this month.*

Note: The Tsavo Parks are huge comprising 22,000km² (TENP, TWNP & CHNP) and then a further 20,000km² totaling 42,000km² to form the Tsavo Conservation Area (TCA).

***Aerial:** 37 hours flown covering 4,150 kilometers over Tsavo in support of KWS.*

***Ground:** 952 kilometers of foot patrol and a further 19,459 kilometers of vehicle patrol in Tsavo to support KWS.*

Activities cover: Air & ground security patrols; Big Tusker monitoring; Rhino related activities; Locating illegal activities; Wildlife monitoring; Aerial census and telemetry tracking as well as Community Conservancy aerial and ground activities.



19th December 2021: Photo shows a very green Tsavo background, with bull elephant crossing the Mombasa to Nairobi highway that splits Tsavo East and West Nat. Parks. These observations are becoming more and more common as the elephant population increases with enhanced security over recent years.



5th December 2021: Joint patrol efforts of KWS/TT/SWT arrested 1 bushmeat poacher (others escaped) in possession of a freshly poached bull eland (400kg of bushmeat), outside TENP on Kulalu Ranch.

Bushmeat poaching remains a very real threat to wildlife, especially on the boundaries of the Parks where communities have limited forms of income generation. This is where the Community Conservancy model comes into meaningful action as more conservancies in the TCA unfold.



8th December 2021: shows refurbishment of old Chyulu Gate in TWNP's IPZ as a permanent ranger outpost. Here is one of 3 ranger barracks. Included is a kitchen, ablution block, water tanks, Officers room and in early 2022 a shaded area and toilets will be completed for visitors and tourists that pass through along the main access route close by. This project, to support KWS, has been generously funded by US Fish & Wildlife Service – African Elephant Conservation Fund.

Field Mobile Units:

Tembo 1, 3, 5, 7 teams, Kamungi & Shirango Scouts are habitat protection / de-snaring focused.

Tembo 2 (TENP) & 4 (TWNP) teams are wildlife monitoring dedicated.

All teams work alongside KWS daily and provide further “eyes and ears in the field”.



Habitat Protection / De-snaring teams:

Table 7: Shows outcomes from field activities from Tembo 1, 3, 5, 7, Kamungi & Shirango Scout teams:

De-snaring teams	No. Field days	No. Arrest	No. Ivory recvd.	No. Snare recvd.	Bushmeat at recvd. Kg	Poacher equip. recvd.	No. Poacher camps	No. HWC Cases	Vehicle mileage km	Foot Patrol km
Tembo 1 (TENP) & Shirango Scouts (6 TT Scouts + 3 KWS Rangers)	31	-	15 Elephant tusks	18 9 small 9 medium	30kg 1 lesser kudu 1 impala 2 dikdiks	1 panga 1 siren Poacher ID card	1 active	-	4,075	255
Tembo 3 (TWNP) (6 TT Scouts + 3 KWS Rangers)	31	-	-	2 Bird traps	-	-	-	5 4 HEC 14 elephants driven from farms at night by TT/KWS 1 buffalo case	2,499	166
Tembo 5 (TWNP) 6 TT Scouts + 3 KWS Rangers	20	9 9 illegal cattle herders	-	-	-	-	-	-	2,711	164
Tembo 7 (Kulalu/TENP) 5 TT Scouts + 3 KWS Rangers	31	5 1 Bushmeat poacher 4 illegal herders	4	-	400kg 1 male eland	1 motorbike 1 bicycle 2 spotlights 1 siren 1 pangas	-	-	2,965	161
Kamungi Scouts 4 Scouts	31	-	-	-	-	-	-	-	-	206
TOTALS	144	14	19	20	430kg	As above	1	5	12,250	952
Total 2021	1,720	120	65	1,233	1,158kg	-	25	519	139,694	9,595

Monitoring & Evaluation teams:

Table 8: Shows activities carried out by Tembo 2 & 4 teams – monitoring & evaluation:

Monitoring teams	No. Field days	Activities	Endangered species records / sightings	Operating locations	Vehicle mileage km
Tembo 2 (TENP) (3 TT staff + 2 KWS) 	24	-Tusker monitoring -Hirola monitoring -Grevy's zebra monitoring -Carnivore monitoring -Carnivore scat analysis: hair content -Highway & SGR roadkill surveys -Camera trap surveys -Fixed point photos -Collared elephant reporting	-Tuskers – 11 sighting -Hirola – 4 -Grevy's Zebra – nil -Large Carnivores – 9 Ground Hornbill - 4 -Road & Rail kills – 20 -Elephant carcasses – 1 -Ivory recvd. – 2 -Rain gauge readings -Collared elephants – 2 Carnivore scat collect – 0	Tsavo East Nat. Park – mainly southern, central and eastern sections including Shirango Conservancy	3,353
Tembo 4 (TWNP) (2 TT staff + 4 KWS) 	31	-RHINO monitoring – TW IPZ -Camera trap surveys - rhino -Big Tusker monitoring -Large Carnivore monitoring -Collared elephant reporting	-IPZ Rhinos – 15 -Tuskers - 0 -Large Carnivores – 3 -Collared elephants – nil -Elephant carcasses – nil -NRS Rhino night census – n/a	Tsavo West Nat. Park – IPZ and Triangle	3,656
TOTALS	55	As above	As above	As above	7,209
Total 2020	643	-	-	-	85,384

ACTIVITY	KAMUNGI Conservancy	SHIRANGO Community Conservancy
<i>Ongoing partnership between Tsavo Trust & KC & SCC</i>	North boundary of TWNP – Triangle. Total area 101km ² Makueni County; Kibwezi Sub County; Mtito Andei Division; Mtito Andei Sub-location; Ngiluni Village.	South boundary of TENP – Voi River area. Total area 270km ² . Kilifi County; Ganze Sub-location; Bamba Ward; Mitangani location; Gede Sub-location.
<i>Employment (Through Tsavo Trust)</i>	Between Tsavo Trust & partners 36 permanent staff & 15 casual staff employed generating over \$10,000 (Ksh.1,000,000) of income into Kamungi monthly.	Tsavo Trust employs 14 staff from SCC including a Community Liaison Officer (CLO) to spear head activities. Salaries generate over \$2,500 (Ksh.250,000) of income monthly.
<i>Community Mobilization and Sensitization Meetings</i>	16 community meetings held <ul style="list-style-type: none"> ➤ Mtito Fence meeting: GMC, TT/Kamungi, KWS - HWC ➤ SAPA Process trainings & baraza's ➤ Makueni Dev. Trust ➤ Board Meeting ➤ VSLA's ➤ 10% Fence Planning meeting 	3 community meetings held <ul style="list-style-type: none"> ➤ General Community – drought etc ➤ Chiefs Office baraza
<i>Membership</i>	Through a registered CBO KC membership represents 140 families & over 1,400 individuals from 2 villages, mainly from the WaKamba community.	Through a registered CBO SCC membership represents at least 2,300 individuals from 5 villages, mainly from the Watha and Giriama ethnic groups.
<i>Water Project</i>	15,330 litres of water issued. (896,567 litres for year to date) Piped water to Ngiluni school now	Bore hole, pump and solar panels are in place, but saline water. Plans for construction of an earth dam underway if funded.
<i>Basic Health care</i>	242 patients attended (3,406 for year to date).	There is need to support this project.
<i>Constructions</i>	Honey processing room-completed	Scouts HQ completed
<i>Basic Education</i>	Paid for 2 teachers (1-Ngiluni & 1-Kamunyu School in KC) for the last 9 years. Ongoing.	No activities yet.
<i>Village Saving & Loan Associations – VSLA's</i>	5 women run VSLA's are in progress: partnership between ZSL / KC & TT	None at present.
<i>Poultry Project</i>	3 poultry projects: partnership between ZSL / KC & TT	
<i>Training</i>	VSLA, HWC mitigation, SAPA	Scouts trained on GPS use & data collection
<i>HWC Mitigation Elephant Bee Fence</i>	7 x 1-acre bee fences, total 105 beehives with 12 currently occupied.	N/A yet
<i>10% Fence Plan</i>	10% fence plan completed Phase 2 completed: Total 12 plots (HWC electric fencing of 10% of individual land).	N/A yet
<i>Mtito 30km fence line</i>	7 predator proof bomas set up: by TT/ZSL	N/A yet
	13/9/21: Started – Completed 30/11/21	N/A yet
<i>Human Wildlife Conflict (HWC)</i>	48 cases recorded: 39 elephant; 4 lion; 2 buffalo; 1 poisonous snake	9 cases recorded: 4 lion; 4 hyena, 5 hyena
<i>Land Tenure</i>	Ongoing	SCC land currently traditional communal mode of ownership, not legally protected. Efforts underway to ensure the local communities legally own their land. Ongoing.
<i>Wildlife Census Transects</i>	Nil	None
<i>Operations and Security</i>	➤ See Field Units table above	➤ See Field Units table above

Unusual Photo of the Month:



17th December 2021: photo shows Mbololo B sand dam in TENP full of water, with the sand base also accumulating well. Through the 4-way partnership between KWS/Tsavo Trust/Africa Sand Dam Foundation and Excellent Development a total of 6 sand dams have been constructed over the last 18 months. What is special now is that every one of these is full and holding significant and sustainably fed water supplies for wildlife. Just one month ago none of us believed the rains were coming, but fortunately they did, and these water sources will hold water for wildlife until the next rains due in April.

Disney Conservation Fund through Wildlife Conservation Society (WCS) has supported the sand dam project very significantly with 5 sand dams to date.

With sincere thanks and appreciation:

Organizations: Kenya Wildlife Service; USAID/DOI; US Fish & Wildlife Service; CITES / MIKE Programme-funded by the European Union; The Oak Foundation; Leopardess Foundation; JM Foundation Africa; Cheyenne Mountain Zoo; Save The Elephants (STE); Global Wildlife Conservation (GWC); Tusk Trust; Rhino Recovery Fund (WCN); International Elephant Foundation (IEF); Disney/Wildlife Conservation Society (WCS); IUCN Save Our Species; Zoological Society of London (ZSL); Georg Waechter Memorial Foundation; Maliasili; EU-Biopama Programme; The Glassybaby Foundation; Ndovu Trust (UK); Satao Camp & Southern Cross Safaris (Msa); Origins Safaris; Ker & Downey Safaris; Tropical Ice Ltd; OnSafari-Kenya; Askari Project–Australia; Tofauti Foundation; Maasai Wilderness Conservation Trust (MWCT); Chesbro Foundation; Milkywire; Elephant Cooperation; Off Piste Africa; Empowers Africa; Enos Enterprises–Tembo Wine; 51 degrees-Vulcan; Conservation Alpha; JW Seagon Insurance; World Book; Lewa Canada; Prints for Conservation; two, Remembering Wildlife Books and many more.

Individuals: Stuart Herd; Nick Southgate; Nicole Honegger; Griet Van Malderen; The Kratt Family; Loic Gouzer; Nick Lapham; Alex Graham; Nick Powell; James Robertson; The Davies Family; Mike Kirkland; Paul Block; Anita Mishra & Paolo Mapelli; James Lewin; the late John Fletcher; Paul & James Wilson; James Chiappa; David Calderone; Will Burrard-Lucas; Drew Doggett photography; Goh & Courtney Iromoto; the Kiddingtons; Marie de Brouwer; Kim Makenzi; Howard Saunders; Sandor Carter; Sean Dundas; Karen Laurence-Rowe; John Carr; Max Haller; Anthony Cheffings; Andreas Fox; Paolo Parazzi; Sam Stogdale; Prints for Conservation; Johan Marais; Chris Acreman; Alex Hunter and numerous other enthusiasts.

Report compiled by Richard Moller – Chief Executive Officer, Tsavo Trust

All photographs ©Tsavo Trust 2021