



Tsavo Trust is an action orientated, field-based, Kenyan not-for-profit conservation organization that recognizes the importance of a holistic approach to biodiversity conservation. www.tsavotrust.org

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

FEBRUARY 2023 MONTHLY REPORT



The photo above is of two Super Cub aircrafts operated by the Tsavo Trust. They are best known for their short take-off and landing capabilities as well as their slow flying speed. They provide an ideal vantage point that allows us to survey large areas, essential for elephant, rhino and other wildlife monitoring. They have proved indispensable for picking out illegal activities in the vastness of the Tsavo Conservation Area, as well monitoring collared and transmitted wildlife species (elephants, rhino, lion etc) but also wildlife movements, mapping of invasive plant species and much more. Photo Credit: Tsavo Trust – Nick Haller.

SUMMARY of ACTIVITIES:

WILDLIFE CONSERVATION PROGRAM: *Big Tusker Project – Aerial & Ground Activities*

Activity	Hours Flown	Kilometers Covered
 Aerial Unit	40 (93 for year) Average 118km p/h of low-level flight	4,955 (10,997km for year) Flights carried out jointly with KWS staff
 Rhino Aerial Patrols	Aerial Patrols: 21 (5 TWNP; 2 TENP) (42.5hrs for year to date)	Aerial: 2,407 (4,858km for year)
	Field Patrol Days	Kilometers Covered
Ground Protection Activities (Joint with KWS / TT & Community Scouts)	Protection teams: 168 days (354 to date) Monitoring teams: 56 days (106 to date)	Vehicle patrols: 16,864km (37,872km to date) Foot patrols: 952km (1,784km to date) Monitoring teams: 7,350km (13,693km to date)
 Big Tusker Project	11 Tuskers - 2 Super Tusker bulls (14 sights), 7 emerging bulls (19 sights), 2 cow Tuskers (2 sights): 35 individual observations	
Collared Elephant Sightings: Joint KWS/STE/TT program	8 sightings: record forms submitted to STE (aerial and ground observations)	
Ivory recovered	7 elephant tusks (26 for the year to date)	
Elephant mortality	Fresh: 1 (c of d: Natural) (Less than 3 weeks old)	Recent: 1 (c of d: Natural) (Less than 3 months old)
		Old: 1 (c of d: Unknown) (More than 3 months old)
High Value Species Monitoring	Ongoing partner with KWS TCA Research / WRTI: Monitoring Hirola, Grevy's zebra, large carnivores, Roadkill Surveys, Southern Ground Hornbill etc	
Wildlife - Treatment & Translocation	Venomous snakes re-located from communities: 2 Red spitting cobras (<i>Naja Pallida</i>) Others: Nil	
Poacher camps/hides	Fresh – Nil (1 to date)	Recent – Nil (1 to date)
Arrests – joint KWS/TT	47 – 26 illegal herders; 1 bushmeat poacher; 1 logging and 19 for illegal entry (157 for the year to date)	
Snares/traps recovered	158 by Tembo Teams: 252 snares for the year to date (199 small; 49 medium; 4 large)	
Bushmeat recoveries (wet & dried)	496kg (861kg for the year to date) 106 Dik-diks; 4 Generuk	
Poachers Equip. Recvd.	6 knives; 2 lamping horns; 6 torches; 1 club	
Night Ambushes	Joint KWS / TT: 22 (LMD; Wangala; Kyulu hill; Tsavo River; Maungu; Triangle; Ziواني; Bondeni; Murondo)	
Firefighting	Nil - (Fire outbreaks greatly reduced by rainfall experienced in Nov 2022)	
Human Elephant Conflict	Joint TT-KWS team: 6 elephants driven from farmlands east of Mtito Andei Nil elephant driven from farmlands in Shirango	
Illegal Livestock (only in PA)	27 active cattle boma (5,772 cows; 820 shoats; Nil donkeys; 27 people)	
Written reports to KWS	82 (daily Situation reports, various communications & 1 monthly report)	
TT Staff Training activities	2 TT Officers Masters training; 1 KWS Officer Masters training; 1 TT Officer Bachelors training; Community livelihood training on Climate Smart Agriculture.	
TT HQ Rainfall figures	1mm. Total rainfall to date for 2023: 14mm	

Significant notes	18/02/2023. Rhino monitoring aerial reconnaissance in Tsavo West National Park's Ngulia Rhino Sanctuary with KWS ranger. Record of 48 black rhinos were sighted. 21/02/2023 – 24/02/2023: Four days training of 60 local farmers on dry land best farming practices (Climate Smart Agriculture training). The training was carried out by Kenya Agricultural and Livestock Research Organisation (KALRO) experts and facilitated by TT / IFAW / USAid project. 23/02/2023 – 25/02/2023: Tsavo Trust represented in the Makueni County Government Partners workshop regarding the 2023 – 2027 County Integrated Development Plan (CIDP) in Wote, Makueni.
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COMMUNITY CONSERVANCY PROGRAM:

 Kamungi Conservancy ➤ Located: Northern boundary TWNP Triangle ➤ TT has played a stewardship role and partnered with KC since 2014	 Shirango Community Conservancy ➤ Located: Southeast boundary TENP ➤ TT has played a stewardship role and partnered with SCC since 2016
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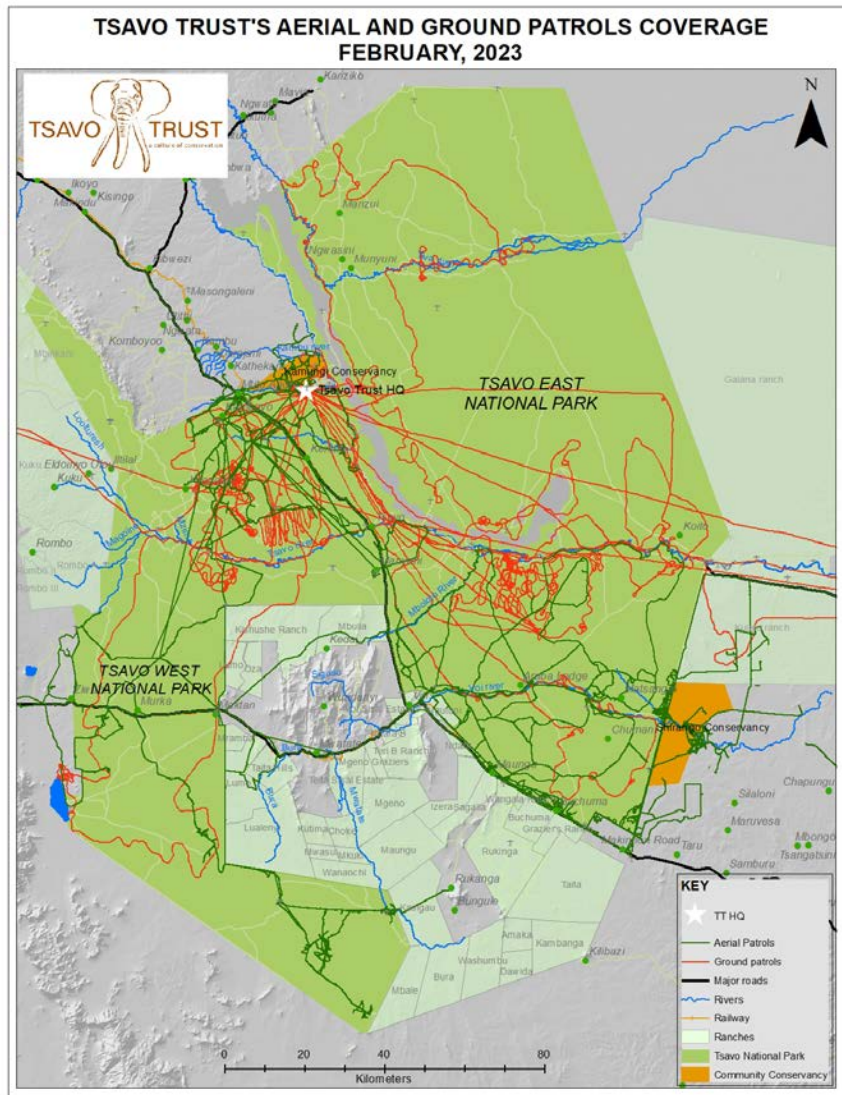
FORMAL FIELD CONSERVATION PARTNERS PROGRAM: (Full list of supporters/partners shown on last page)





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 aerial patrols 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.



*The 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:** 40 hours flown covering 4,955 kilometers over Tsavo in support of KWS.*

***Ground:** 952 kilometers of foot patrol and a further 24,214 kilometers of vehicle patrol in Tsavo to support KWS.*

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

***Below:** 19/01/2023: The photo below is of a buffalo carcass being scavenged upon by Marabou stock and vultures. With the uneven distribution of the November and December 2022 rainfall, some areas are still dry with insufficient resources for wildlife use. The photo was taken from the air during a routine aerial reconnaissance on 28/02/2023. Photo Credit: Tsavo Trust – Nick Haller.*



Field Mobile Units:

Tembo 1, 3, 5, 7, 9 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, 9 Kamungi & Shirango Scout teams:

De-snaring teams	No. Field days	No. Arrest	No. Ivory recvd	No. Snare recvd	Bushmeat 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)	28	14 All illegal herders	-	31 11 small 20 medium	-	3 knives & 1 spotlight	-	-	3,148	368
Tembo 3 (TWNP) (6 TT Scouts + 3 KWS Rangers)	28	6 All illegal herders	-	-	-	2 knives & 3 torches	-	-	3,037	94
Tembo 5 (TWNP) 6 TT Scouts + 3 KWS Rangers	28	1 Illegal logger	2	-	496 kg Dik-diks and Gerenuks	1 lamping horn, 1 torch & 1 knife	-	-	2,045	147
Tembo 7 (Kulalu/TENP) 5 TT Scouts + 3 KWS Rangers	28	3 All illegal herders	-	2 All medium game snares	-	-	-	-	2,726	104
Tembo 9 (Kulalu/TENP) 5 TT Scouts + 3 KWS Rangers	28	19 All for illegal entry	-	3 All big game snares	-	-	-	-	3,997	78
Kamungi Scouts 4 Scouts	28	4 3 illegal herders & 1 bushmeat poacher	1	122 112 small 9 medium 1 large	-	1 spotlight & 1 club	-	6 5 HEC & 1 Baff. Incidents responded to.	1,911	161
TOTALS	168	47	3	158	496 kg	As above	Nil	6	16,864	952
Total 2023	354	157	14	252	861 kg	-	2	25	37,872	1,784

Monitoring & Evaluation teams:

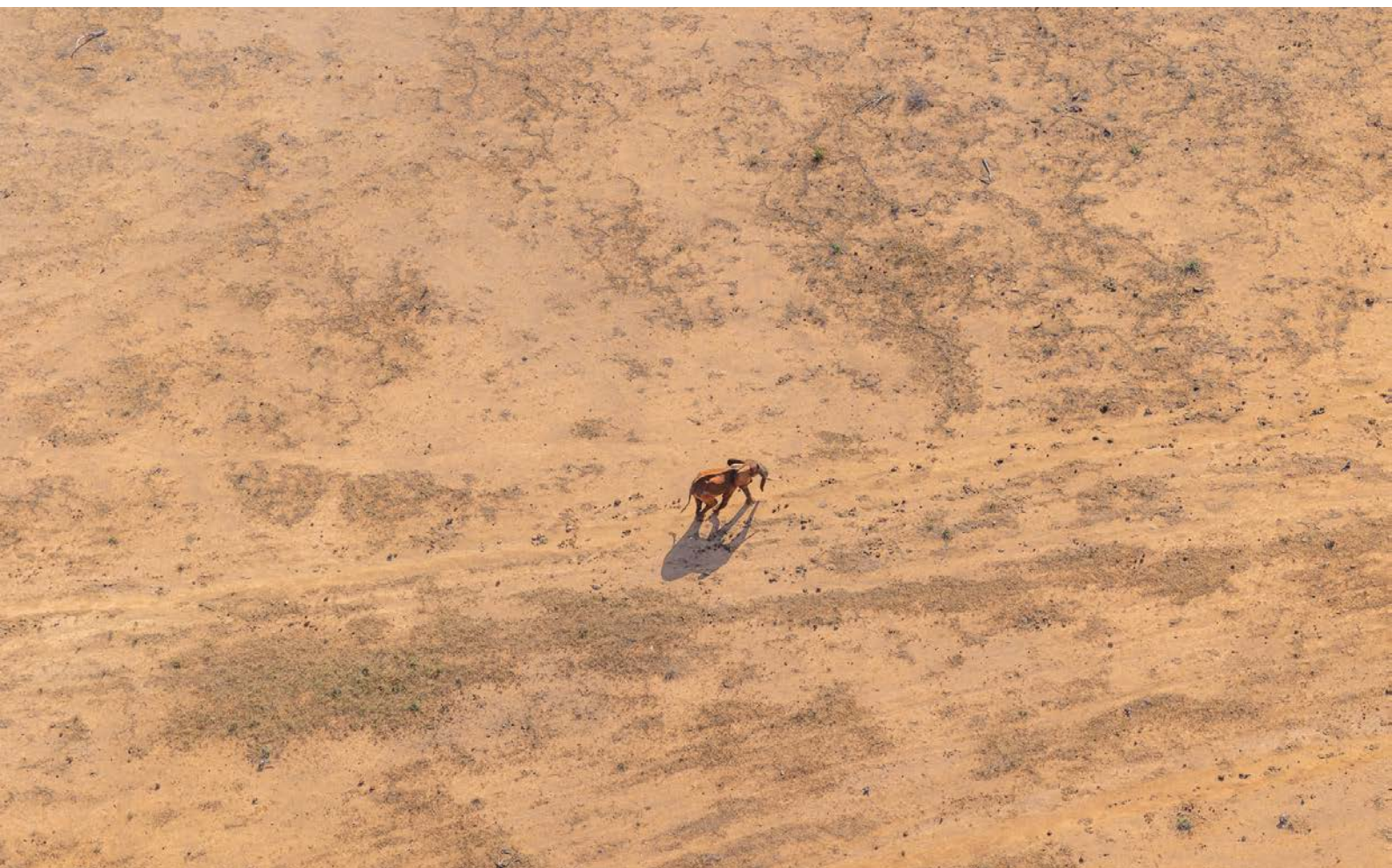
Table 8: Shows activities carried out by Tembo 2 & 4 teams – monitoring & evaluation:

Monitoring teams	No. Field days	Activities	Endangered species records/sightings	Operating locations	Vehicle mileage km
Tembo 2 (TENP) (3 TT staff + 2 KWS) 	28	-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 – 33 sightings -Hirola – 6 sightings -Grevy's Zebra – 1 -Large Carnivores – 35 sightings Ground Hornbill – 21 sightings -Road & Rail kills – 1 -Elephant carcasses – 2 -Ivory recovered. – 4 -Collared elephants – 5 -Carnivore scat collected - 18	Tsavo East Nat. Park – mainly southern, central, and eastern sections including, Voi River & Shirango Conservancy	3,307
Tembo 4 (TWNP) (2 TT staff + 4 KWS) 	28	-RHINO monitoring – TW IPZ -Camera trap surveys - rhino -Big Tusker monitoring -Large Carnivore monitoring -Collared elephant reporting	-IPZ Rhinos – 20 -Tuskers - Nil -Large Carnivores – 1 sighting -Collared elephants – Nil -Elephant carcasses – Nil - Ivory recovered. – Nil -NRS Rhino night census – N/A	Tsavo West Nat. Park – IPZ and Triangle	4,043
TOTALS	56	As above	As above	As above	7,350
Total 2023	106	-	-	-	13,693

COMMUNITY CONSERVANCY **PROGRAM:**

ACTIVITY	KAMUNGI Conservancy	SHIRANGO Community Conservancy
Ongoing partnership between Tsavo Trust & KC & SCC	North boundary of TWNP – Triangle, since 2014. Total area approx. 100km ² Makueni County; Kibwezi Sub County; Mtito Andei Division; Mtito Andei Sub-location; Ngiluni Village.	South boundary of TENP – Voi River area, since 2016. Total area 270km ² . Kilifi County; Ganze Sub-location; Bamba Ward; Mitangani location; Gede Sub-location.
Employment (Through Tsavo Trust)	Between Tsavo Trust & partners 45 permanent staff & 15 casual staff employed generating over \$12,000 (Ksh.1,320,000) of income into Kamungi monthly.	Tsavo Trust employs 14 staff from SCC including a Community Liaison Officer (CLO) to spearhead activities. Salaries generate over \$3,000 (Ksh.330,000) of income monthly.
Community Mobilization and Sensitization Meetings	18 community meetings held ➤ 04/02/2023. Kamungi Conservancy board meeting. 10 board members attended. ➤ 13/02/2023. Meeting on the implementation of the USAID-funded project at Kamungi with IFAW. ➤ 17/02/2023. Apiary project management committee training jointly with ZSL. ➤ 21/02/2023. Climate-smart agriculture training with KALRO. ➤ 22/02/2023. Mtito Andei conservation stakeholder's forum held at TWNP. ➤ 23/02/2023. Makueni County government partners workshop. ➤ 26/02/2023. Kamungi monthly meeting.	7 community meetings held. ➤ 06/02/2023. Meeting on land tenure issues with Larpei and Company advocates. ➤ 13/02/2023. Meeting on the implementation of the USAID-funded project at Shirango with IFAW. ➤ 18/02/2023. Monitoring of Climate-smart agriculture demo farms, identifying challenges encountered and lessons learned. ➤ 18/02/2023. Meeting with Shirango Youth Empowerment group who sought guidance on registration of youth groups. ➤ 21/02/2023. Meeting with the administrator of Shirango ECDE to discuss the institution's needs.
Membership	Through a registered CBO KC membership represents 140 families & over 1,400 individuals from 2 villages, mainly from the WaKamba community. Considerable interest for more membership from villages to the west towards Mtito	Through a registered CBO SCC membership represents at least 2,300 individuals from 5 villages, mainly from the Watha and Giriama ethnic groups.
Water Project	46,540 litres of water issued. (46,540 litres for the year to date) Ngiluni Primary School connected to piped water.	Borehole, pump, and solar panels are in place, but saline water. Construction of an earth dam completed.
Basic Health care	128 patients attended (128 for the year to date).	There is a need to support this project
Constructions	Honey processing room completed and opened by Governor Makueni C. on 25/01/22	Scouts HQ completed
Education	Paid for 2 teachers (1-Ngiluni & 1-Kamunyu School in KC) for the last 9 years. Ongoing.	Construction of an Earth dam completed
Bursary Scheme	Started on April 22 7 needy students selected being supported.	None at present
Village Saving & Loan Associations – VSLA's	5 women-run VSLAs are in progress: partnership between ZSL / KC & TT	None at present
Poultry Project	3 poultry projects: partnership between ZSL / KC & TT	None at present
Training	VSLA livelihoods, HWC Mitigation, Climate Smart Agriculture, permaculture	Climate Smart agriculture by KALRO.
HWC Mitigation	7 x 1-acre bee fences, total 105 beehives with 9 currently occupied.	N/A yet
10% Fence Plan	10% fence plan completed Phase 2 completed: Total 12 plots (HWC electric fencing of 10% of individual land). There are issues with plots/land being purchased by a local NGO in this area that is threatening this innovative project, but mitigating measures are in place	8 beneficiaries of the 10% fence plan have already been identified.
Predator Proof bomas	7 predator-proof bomas set up: by TT/ZSL	N/A yet
Mtito 32km fence line	Completed 30/11/21 with 95% HEC reduction	N/A yet
Human Wildlife Conflict (HWC)	27 cases recorded: 11 elephant; 1 lion; 10 buffalo and 5 snake-related incidents.	12 cases were recorded: 10 elephant; 1 hyena; 1 snake-related incident.
Land Tenure	Ongoing	SCC land is currently a traditional communal mode of ownership, not legally protected. Efforts are underway to ensure the local communities legally own their land.
Wildlife Census Transects	1	None
Operations and Security	➤ See the Field Units table above	➤ See the Field Units table above

Unusual Photo of the Month:



The photo above shows a lone bull elephant strolling to water in Tsavo East National Park on the morning of 03/02/2023. The long dry patch sits in between the elephant's feeding area, several kilometers away and the Galana River where the elephant walks to water. The effects of climate variability on vegetation are quite evident in certain areas of Tsavo. Photo Credit: Tsavo Trust – Nick Haller.

With sincere thanks and appreciation:

Organizations: Kenya Wildlife Service; Government of Makueni County; USAID / DOI; US Fish & Wildlife Service; CITES / MIKE Programme-funded by the European Union; Cheyenne Mountain Zoo; Leopardess Foundation; JM Foundation Africa; Save The Elephants (STE); Elephant Crisis Fund; Re:wild; Tusk Trust; Rhino Recovery Fund (WCN); Lion Recovery Fund (WCN); International Elephant Foundation (IEF); Disney/Wildlife Conservation Society (WCS); IUCN Save Our Species; Zoological Society of London (ZSL); The Glassybaby Foundation; Maliasili; EU-Biopama Programme; Tofauti Foundation; Chesbro Foundation; Milkywire; Satao Camp & Southern Cross Safaris (Msa); Origins Safaris; Ker & Downey Safaris; Ndovu Trust (UK); Tropical Ice Ltd; OnSafari-Kenya; Askari Project–Australia; Exodus Travel; Maasai Wilderness Conservation Trust (MWCT); Off Piste Africa; Empowers Africa; 51 degrees-Vulcan; Conservation Alpha; Lewa Canada; Prints for Conservation; Remembering Wildlife Books and many more anonymous donors.

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; Anita Mishra & Paolo Mapelli; James Lewin; the late John Fletcher; Paul & James Wilson; James Chiappa; David Calderone; Will Burrard-Lucas; Drew Doggett photography; the Kiddingtons; Marie de Brouwer; Kim Makenzi; Paolo Parazzi; Sam Stogdale; Howard Saunders; Sandor Carter; Sean Dundas; Andreas Fox; Karen Laurence-Rowe; Alex Hunter; John Carr; Max Haller; Anthony Cheffings; Prints for Conservation; Chris Acreman and numerous other dedicated enthusiasts.

Report compiled by Richard Moller (C.E.O) and the Tsavo Trust Team.

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