



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

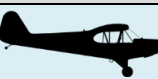
Tsavo Trust film clip: <https://www.youtube.com/watch?v=qGgM6-ggZOE&t=270s>

DECEMBER 2022 MONTHLY REPORT



The photo above shows Super Tusker coded as KM2. He is one of the 8 remaining Super Tuskers in Tsavo after Lugard died in November 2022. KM2 was originally recorded in the Big Tuskers Monitoring Database as an Emerging Tusker in 22/05/2015. His Ivory grew exponentially over the next 5 years which saw his status elevated into a Super Tusker on 16/04/2021. Tsavo is home to at least 25 Emerging Tuskers, given time and space, they will be the future Super Tuskers of Tsavo. Photo credit Tsavo Trust – Joseph Kyalo.

SUMMARY of ACTIVITIES:

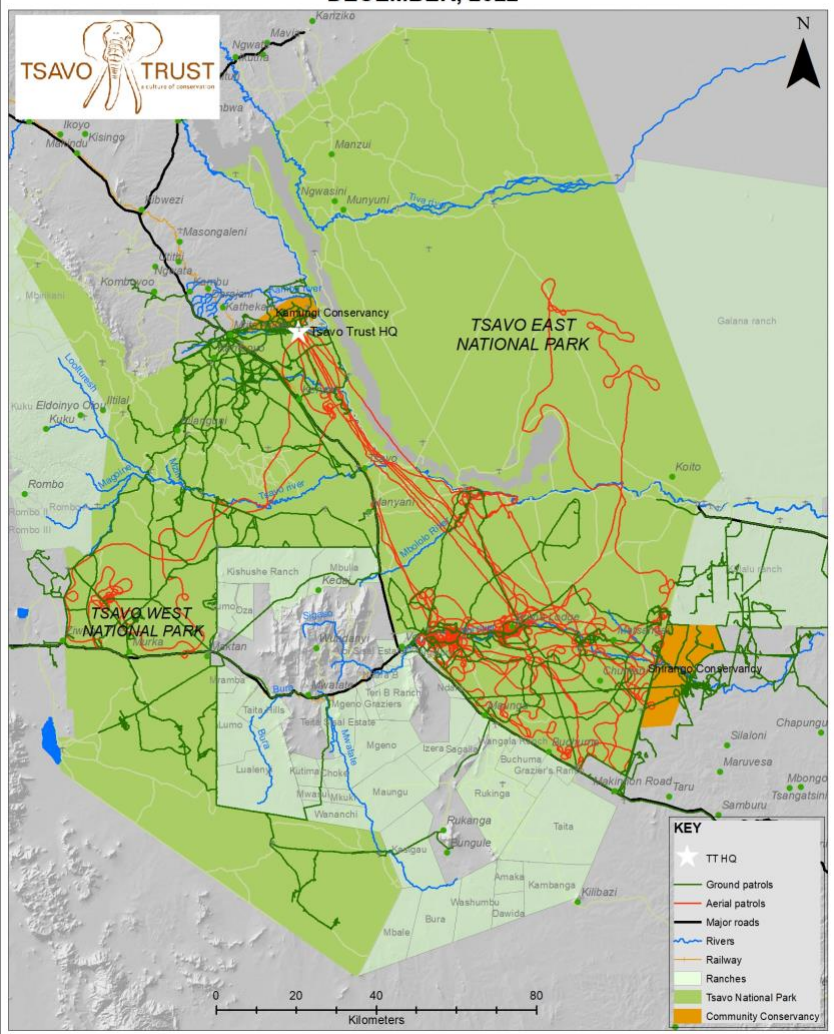
WILDLIFE CONSERVATION PROGRAM: <i>Big Tusker Project – Aerial & Ground Activities</i>					
Activity		Hours Flown		Kilometers Covered	
	Aerial Unit	24 (636 for year) Average 131km p/h of low-level flight		3,563 (83,370km for year) Flights carried out jointly with KWS staff	
	Rhino Aerial Patrols	Aerial Patrols: 7.5 (1 TWNP; 2 TENP) (218hrs for year to date)		Aerial: 840 (26,224km for year)	
		Field Patrol Days		Kilometers Covered	
Ground Protection Activities (Joint with KWS / TT & Community Scouts)		Protection teams: 186 days (1,942 to date) Monitoring teams: 52 days (664 to date)		Vehicle patrols: 18,160km (152,427km to date) Foot patrols: 1,134km (11,972km to date) Monitoring teams: 6,376km (90,097km to date)	
	Big Tusker Project	7 Tuskers - 1 Super Tusker bulls (4 sights), 4 emerging bulls (9 sights), 2 cow Tuskers (2 sight): 15 individual observations			
Collared Elephant Sightings: Joint KWS/STE/TT program		3 sightings: record forms submitted to STE (aerial and ground observations)			
Ivory recovered		32 elephant tusks (126 for year to date)			
Elephant mortality		Fresh: 2 (c of d: Both natural) (Less than 3 weeks old)	Recent: 7 (c of d: 6 Natural, 1 unknown) (Less than 3 months old)	Old: Nil (c of d:) (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: 3 Boomslang; 2 Red spitting cobra & 1 Puff Adder Others: Nil			
Poacher camps/hides		Fresh – Nil (11 to date)		Recent – 3 (8 to date)	
Arrests – joint KWS/TT		49 – 2 ivory dealers; 41 illegal herder; 2 bushmeat poachers and 4 illegal entry (251 for year to date)			
Snares/traps recovered		113 by Tembo Teams: 1,761 snares to date 2022 (1,401 small; 306 medium; 54 large)			
Bushmeat recoveries (wet & dried)		204kg (2,420kg for year to date) 2 Zebra; 1 Dik-dik; 1 Francolin			
Poachers Equip. Recvd.		1 pangas; 2 motorbike; 3 knife; 1 lamping horn and 2 mobile phones			
Night Ambushes		Joint KWS / TT: 6 (Shauri Moyo; LMD; TWNP-IPZ; Maungu and Murondo Ranch)			
Firefighting		Nil - (Fire outbreaks greatly reduced by rainfall experienced in Nov)			
Human Elephant Conflict		Joint TT-KWS team: 23 elephants driven from farmlands east of Mtito Andei (184 elephants pushed from farms – Jan-Oct22 compared to 1,679 in Jan-Oct21 = 89% reduction from TT fence)			
Illegal Livestock (only in PA)		2 active cattle boma (4,210 cows; 940 shoats; Nil donkeys; 45 people)			
Written reports to KWS		62 (daily Situation reports, various communications & 1 monthly report)			
TT Staff Training activities		3 TT Officers Masters training; 1 KWS Officer Masters training; HWC community training; Community livelihood training on Climate Smart Agriculture.			
TT HQ Rainfall figures		41mm. Total rainfall to date for 2022: 249mm			
Significant notes		- Dec 2022: Jointly with Kenya Wildlife Service Investigations Officers, Tsavo Trust’s security teams arrested 2 Ivory dealers and recovered 14 elephant ivory (210kg). - Dec 2022. Completion of two sand dams constructed in the Sobo area in Tsavo East National Park. This was made possible through the support from Disney/WCS, Cheyenne Mountain Zoo, and Eden Wildlife Trust. - Dec 2022. 30 dam liners were issued to Kamungi Conservancy Members for harvesting rainwater. We strive to ensure local communities we work with have access to water and will implement viable options to make available this basic need.			
COMMUNITY CONSERVANCY PROGRAM:					
 Kamungi Conservancy		 Shirango Community Conservancy			
➤ Located: Northern boundary TWNP Triangle ➤ TT has played a stewardship role and partnered with KC since 2014		➤ Located: Southeast boundary TENP ➤ TT has played a stewardship role and partnered with SCC since 2016			
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.

**TSAVO TRUST'S AERIAL AND GROUND PATROLS COVERAGE
DECEMBER, 2022**



*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:** 24 hours flown covering 3,563 kilometers over Tsavo in support of KWS.*

***Ground:** 1,134 kilometers of foot patrol and a further 24,536 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:** 16/12/22: Photo shows KWS Ag. Director General, Dr. Erastus Kanga and Tsavo Trust's Fleet manager Samson Mangila in one of two Isuzu Double Cab purchased under the USAID-funded Sustainable Management of Amboseli and Tsavo Ecosystems Project. The vehicles will help in the implementation of the Trust's Community Conservancy Programme in Kamungi and Shirango Conservancies. Photo credit: Tsavo Trust – Joseph Kyalo.*



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)	31	3 2 ivory dealers and 1 bushmeat poacher	14	65 38 small 27 medium	100 kg Zebra	1 knife and 1 motorbike	-	-	2,343	371
Tembo 3 (TWNP) (6 TT Scouts + 3 KWS Rangers)	31	9 Illegal herder	-	38 All small game snares	-	1 lamping horn and 2 mobile phones	-	-	3,595	165
Tembo 5 (TWNP) 6 TT Scouts + 3 KWS Rangers	31	-	2	-	-	-	-	-	1,778	125
Tembo 7 (Kulalu/TENP) 5 TT Scouts + 3 KWS Rangers	31	1 Bushmeat poacher	-	5 All medium game snares	4 kg Dik-dik and Francolin	1 panga and 1 motorbike	-	3 HEC. 8 elephants driven from farms by KWS/TT team	3,131	213
Tembo 9 (Kulalu/TENP) 5 TT Scouts + 3 KWS Rangers	31	36 32 illegal herders and 4 illegal entry	-	5 All big game snares	100 kg Zebra	2 knives	3 All Old	-	4,840	112
Kamungi Scouts 4 Scouts	31	-	-	-	-	-	-	8 7 HEC 23 elephants chased & 1 HCC incident	2,473	148
TOTALS	186	49	16	113	204 kg	As above	3	11	18,160	1,134
Total 2022	1,942	251	44	1,761	2,420 kg	-	19	97	152,427	11,972

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) 	21	-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 – 7 sightings -Hirola – 3 sightings -Grevy's Zebra – 1 sighting -Large Carnivores – 14 sightings Ground Hornbill – 6 sightings -Road & Rail kills – Nil -Elephant carcasses – Nil -Ivory recovered. – Nil -Rain gauge readings -Collared elephants – Nil	Tsavo East Nat. Park – mainly southern, central, and eastern sections including, Voi River & Shirango Conservancy	2,973
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 – 23 -Tuskers - Nil -Large Carnivores – 1 sighting -Collared elephants – Nil -Elephant carcasses – 1 -NRS Rhino night census – N/A	Tsavo West Nat. Park – IPZ and Triangle	3,403
TOTALS	52	As above	As above	As above	6,376
Total 2022	664	-	-	-	90,097

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	14 community meetings held ➤ 28/12/2022. Kamungi Conservancy end of year meeting attended by 80 members with the Nthunguni Sub-location Assistant Chief being the Chief guest. ➤ 16/12/2022. The official handover of the Isuzu double cabin for Kamungi Conservancy under the USAID-funded Sustainable Management of Tsavo and Amboseli Ecosystems. ➤ 15/12/2022. KWS quarterly Community Outreach meeting held at Nthunguni. ➤ 05/12/2022. Monthly/End of year Chief's meeting held at Mtito Andei. ➤ 03/12/2022. Handover of 9m x 8m 30 dam liners for Kamungi Conservancy members – 20 from kamunyu and 10 from Ngiluni.	4 community meetings held ➤ 16/12/2022. The official handover of the Isuzu double cabin for Shirango Community Conservancy under the USAID-funded Sustainable Management of Tsavo and Amboseli Ecosystems. ➤ 15/12/2022. Sustainable Management of Tsavo and Amboseli Ecosystems progress meeting held at Taita Lodge. ➤ 08/12/2022. KALRO Climate Smart Agriculture organic pesticides and weed control herbicides demonstration at Shirango. ➤ 01/12/2022: Mapping of 8 beneficiaries of the 10% Fence Plan.
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	1,360 litres of water issued. (927,260 litres for 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	341 patients attended (3,503 for 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 Construction of an Earth dam completed
Education	Paid for 2 teachers (1-Ngiluni & 1-Kamunyu School in KC) for the last 9 years. Ongoing.	None at present
Bursary Scheme	Started on April 22 5 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
Elephant Bee Fence	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	6 beneficiaries of the 10% fence plan have already been identified.
10% Fence Plan		
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)	24 cases recorded: 14 elephant; 4 leopard; 1 baboon; 1 buffalo and 4 snake.	11 cases were recorded: All Human Elephant Conflict
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 breeding herd of Grevy's zebra taken on 14/12/2022 near Maungu in Tsavo East National Park. Grevy's zebra are indigenous in Northern Kenya and Ethiopia. They were introduced into Tsavo East in 1964 and 1977 to establish a safeguard population due to the declining native population in Northern Kenya. Photo Credit: Tsavo Trust – Christine Mwende.

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; twio, 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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