

SAMBURU COUNTY DEPARTMENT OF VETERINARY SERVICES

DOG & CAT VACCINATIONS

2019-2020



In partnership with:



With support from:



EXECUTIVE SUMMARY

In 2019, several government and non-governmental organizations partnered to link efforts in disease reduction in domestic animals in the Samburu region. In 23 days, over 80 people assisted in the vaccination of 2,642 animals against deadly rabies and distemper viruses across a region spanning over 10,000 km². Over 1,200 households benefited from the project to protect their families and the wildlife living in their communities' against the spread of these diseases.

INTRODUCTION

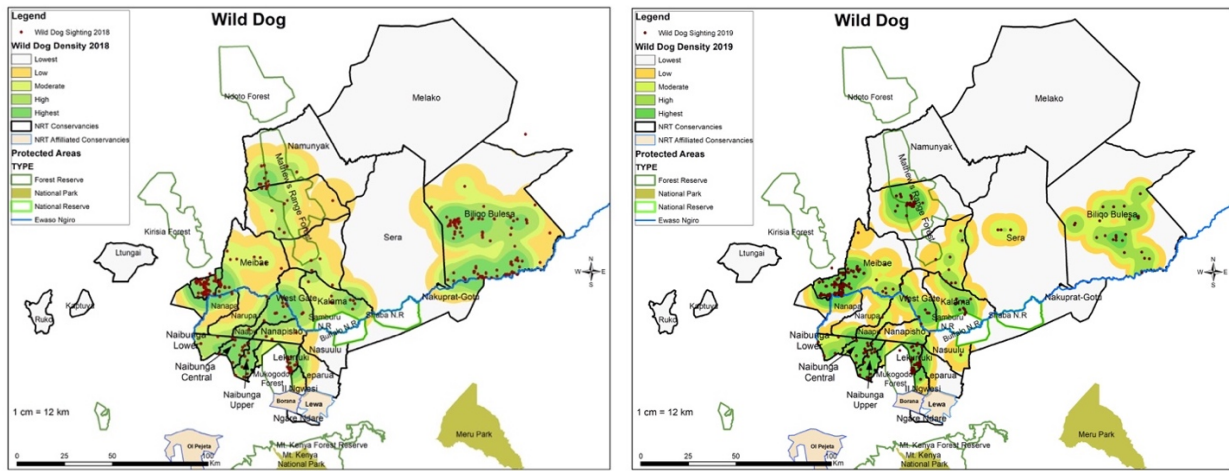
Zoonotic diseases pose critical risk to human populations in both rural and urban environments. Infectious disease poses a critical extinction risk to several endangered wild carnivores. While northern Kenya was not selected as a priority region for the Government of Kenya in the first phase of a National Rabies Elimination Strategy, the Samburu County Department of Veterinary Services has a plan of vaccinating 5000 dogs annually and together with its partners, recognize the growing concern over disease risks in domestic dog, human and wildlife populations in the County. In previous years, several campaigns were randomly led by organisations working on behalf of or in collaboration with the County, but this is the first year that partnerships with private vets and conservation organisations linked to carry out joint campaigns aimed at filling gaps in vaccinations on a County range scale. Ongoing awareness drives and cross sectional sampling of domestic dogs will continue to evaluate the impact of the campaigns in controlling the spread of rabies and canine distemper in this region. This project can act as a model in other regions to eradicate the risk of uncontrolled spread of rabies and distemper by domestic animals.

IMPORTANCE OF VACCINATIONS FOR HUMANS

Kenya's government adopted the "National Rabies Elimination Strategy 2014-2030" to eliminate rabies within its borders by 2030. Rabies is a viral illness affecting the central nervous system and is one of the world's most threatening zoonotic diseases. Rural populations, especially children below 15 years, are at greatest risk of rabies exposure, with 98% of human rabies transmitted by dog bites. An estimated 2,000 human deaths due to rabies occur annually in Kenya [1]. Elimination of rabies is achievable through mass dog vaccination and awareness campaigns [2]. Annual regional vaccination of 70% of the domestic dog population can essentially wipe out the rabies risk to humans and wildlife in five years.

IMPORTANCE OF VACCINATIONS FOR WILDLIFE

While decreasing risk of human rabies, the vaccination of domestic dogs also reduces the risks to wildlife and other domestic stock. Although little research has been carried out on the role of wild carnivores in the sustenance and spread of rabies and distemper, observational reports (unpublished) indicate that cases of dog bites are observed around wildlife habitats. Research indicates that the presence of rabies and distemper in domestic dog populations poses a serious threat to wild carnivores such as the critically endangered wild dogs [3]. Distemper outbreaks have led to rapid declines in wild dog numbers between 2017 and 2019. Many other wild carnivores are also impacted by rabies as well as by canine and feline distemper. Annual vaccination drives in Laikipia through the Laikipia Rabies Vaccination Campaign have been encouraging and inspired partners/conservationists/vets across the Ewaso Nyiro River to embark on vaccinations in Samburu County to work towards ensuring connectivity of vaccinations across county borders.



Maps showing wild dog densities in 2018 and 2019 ©Antony Wandera - Northern Rangelands Trust

The maps above show areas which previously indicated connectivity for wild dogs, however in 2019, gaps in their range are highlighted through the white areas shown.

2019-2020 SUMMARY

The Samburu County Government Veterinary Services has a target of vaccinating 5000 dogs against rabies annually, as outlined in the Samburu County Integrated Development Plan. It was found to be crucial that planned vaccination campaigns include distemper in addition to rabies. **Through collaborating with various partners, a total of 2642 animals (mainly dogs) were vaccinated against both rabies and distemper between 2019 and 2020.** This was initiated following a Kenya Veterinary Association (Wildlife Branch) workshop bringing stakeholders and partners together in July 2019.

VACCINATIONS EFFORTS

The following table show vaccination efforts to date between October 2019 and June 2020.

Date	Conservancy/Location	Number of vaccinations
24 th & 25 th October 2019	Westgate & Kalama Conservancies	330
17 th , 18 th , 19 th January 2020	Meibae Conservancy	908
16 th , 17 th , 18 th March 2020	Westgate Conservancy	437
27 th & 28 th May 2020	Meibae Conservancy	190
29 th , 30 th , 31 st May 2020	Wamba	97
9 th , 10 th , 11 th June 2020	Sarara	175
17 th & 18 th June 2020	Archers Post/Lorubae	173
19 th , 20 th , 21 st June 2020	Milgis	132
24 th & 25 th June 2020	Oi Malo (Laikipia)	200
TOTAL VACCINATIONS ADMINISTERED 2019-2020		2642

Details of each vaccination campaign and the vets involved is provided in the Appendices – starting on Page 7. In addition to vaccinating the animals, pamphlets and pledge cards were given to all animal owners on diseases and ways to improve dog welfare, along with annual vaccination certificates.

Note: On June 1st, 113 distemper vaccines and 150 rabies vaccines were donated to the Northern Kenya Veterinary Unit in Nanyuki for vaccinations around Nanyuki. On the 4th of June, 245 distemper vaccines and 200 rabies vaccines were donated to the KSPCA. All 3000 vaccines were donated by partners.

IMPACT 2019-2020

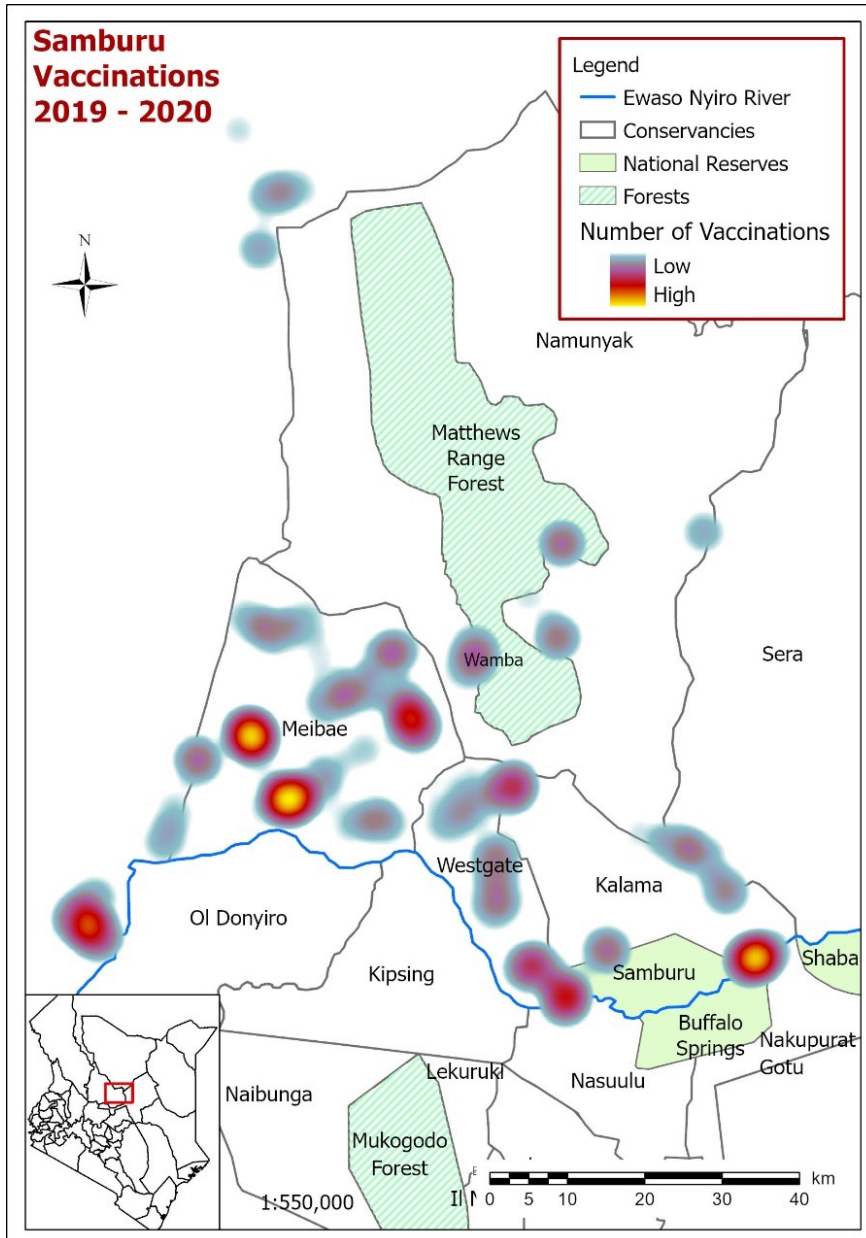
The overall impact between 2019 and 2020 is as follows:

A total of 2642 vaccinations administered	2267 dogs vaccinated	370 cats vaccinated
5 donkeys vaccinated	Over 1210 households visited	48 locations/settlements visited
23 days of vaccinations across the landscape between Oct 2019 & June 2020	27 sterilizations in Meibae Conservancy in Jan 2020	49 participants gather at a workshop on dog management in 2019

MAP OF COVERAGE

The entire area of coverage is shown in the map below. Coverage was predominantly in Samburu County with 200 vaccines administered in Ol Malo – Laikipia County.

SAMBURU RABIES & DISTEMPER VACCINATIONS 2019-2020



Map produced by Ewaso Lions & Action for Cheetahs and cannot be re-printed without permission

PHOTOS (© sourced from various teams on the ground)



Dr Mutunga vaccinates young dog in Learata



Dog arrives on motorbike in Westgate



Vaccination cards given to owners



Daniel Waturu vaccinates a cat in Learata



Dr Chege vaccinates a dog in Sasaab



March 2020 participants in Westgate




Dr Mohsin heads to vaccinations in Meibae



January 2020 participants in Meibae



Vaccinations in the Milgis region



- ✦ KAICHO NDA
- ✦ KAICHO NGARE SUPAT
- ✦ NAREM LDWA
- ✦ NAITUK
- ✦ KAIBONG LDIA LAI AITIBIRAKI
- ✦ KAYELOU LDIA LAI LWENET
- ✦ MAIDONG LDIA LAI
- ✦ KAREM LDIA LAI TONOMUAI
- ✦ NAREM LDIA LAI TANGAMAT AIBOYO MOYIANITIN
- ✦ KOREE PEEMUAI LDIA LAI, NAICHOYO IKILIKWAI ASIOKI
- ✦ KAITIBIRAKI LDIA LAI LOIP PEEMENYA LDAMA

PAIYE ERIP SUAM A INEEN

Cards given out to owners on dog care



Daniel prepares vaccine in Wamba



Ol Malo vaccinations

NB: The dog programmes for Ewaso Lions and Action For Cheetahs are known as Kura's Pride and Ginger's Hope respectively.

TESTIMONIALS

“My dog is healthy and very active at night compared to before the vaccination,” – Mariamu, Westgate

“The vaccinations have prevented diseases such as rabies and have reduced spread of rabies from dog to dog and to carnivores like hyenas that cause so many deaths due to biting people all over,” – Letoole, Westgate

My dog is a herder as well as my home guard at night,” – Rentunai, Westgate

CHALLENGES

The main challenges experienced between October 2019 and June 2020 was initially flooding that took place in October. This was followed by locust invasions in January that led to Westgate vaccinations being postponed. From March onwards, Covid-19 led to delays in the vaccination efforts. All Covid-19 safety protocols were followed in March, May and June vaccination campaigns. Lastly, data collection procedures continued to be a challenge in most vaccination efforts.

FUNDERS

We are very grateful to the following donors for their support in the vaccination work:

- Ewaso Lions Donors through the Wildlife Conservation Network
- Foundation for International Aid to Animals
- Oakland Zoo (in-kind donation of collars/leashes)
- Brian Khepri (in-kind support of all design work)
- Ol Malo Choppers

FUTURE PLANS

1. To identify gaps of coverage and target those areas for new vaccinations (both rabies and distemper)
2. To repeat rabies and distemper vaccinations on an annual basis for the next 4-5 years
3. To collaborate with Isiolo and Laikipia counties to ensure connectivity of areas of vaccination coverage
4. To convene a virtual meeting with all partners to discuss future vaccination work, progress to date and encourage continued collaboration
5. To implement a data collection process that all partners can work with

REFERENCES

1. Kitala PM, et al., Community-based active surveillance for rabies in Machakos District, Kenya. *Prev Vet Med.*, 2000 44 ((1-2)): p. 73-85.
2. ZDU, Ministry of Health & Ministry of Agriculture, Livestock & fisheries. Zoonotic Disease Unit: Strategic Plan for the Elimination of Human Rabies In Kenya 2014-2030. Nairobi: 2014: Nairobi.
3. www.paho.org/en/topics/rabies

APPENDICES

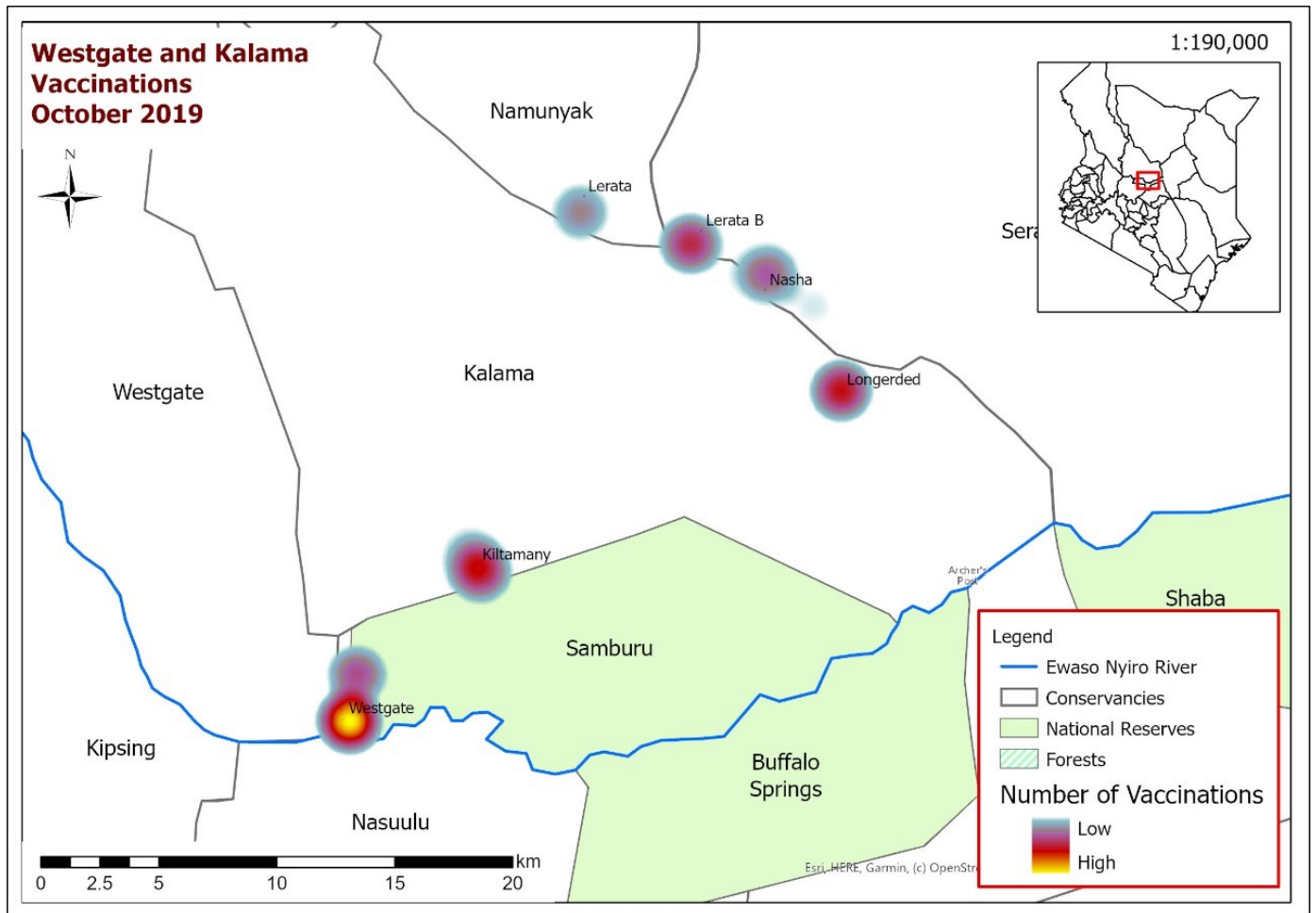
Vaccination efforts 1

Date: 24th and 25th October 2019

Area Name: Westgate and Kalama Conservancies

Locations covered: Lpus, Westgate, Kiltamany, Nasha, Learata, Longerded

Map of coverage:



Vets & Paravets: Daniel Waturu, Dr Mohsin Likoniwalla, Dr Harriet Atiang, Dr Vanessa Maritim, Dr Fridah Mutunga, Joseph Lebarakwe

Participants: Jeneria Lekilelei, Dr Shivani Bhalla, Stephen Lenantoiye, Mary Wykstra, Francis Lendorop, Lmalasian Letoiye, Munteli Lalparasaroi, Lolkororoi, Lembagaani, Lerimara, Yesalai Lemachokoti, Ndume Lebasha, Lesiamito, Moses Lesumante, Kalastar Lekalaille, Area Chiefs, Westgate and Kalama Conservancies.

Vaccination #: 330

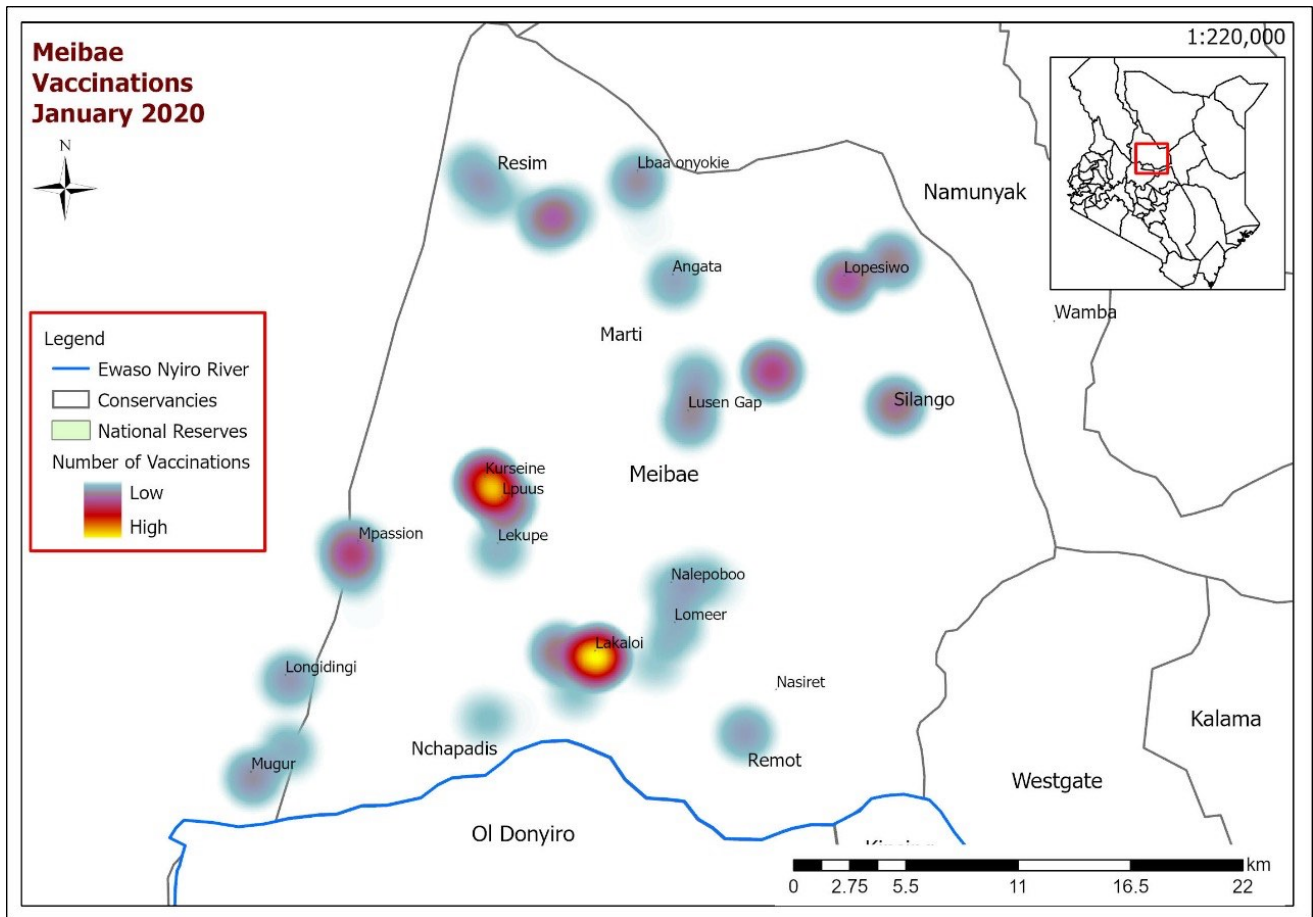
Vaccination efforts 2

Date: 17th, 18th & 19th January 2020

Area Name: Meibae Conservancy

Locations covered: Lpuus, Mabati, Mpassion, Ngaroni, Resim, Lopesiwo, Murgur, Nalepopo, Lbaa Onyokie, Masse, Angata, Lekupe.

Map of coverage:



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Vets & Paravets: Dr Mohsin Likoniwalla, Dr Janerose Mutura, Dr Johnson Munka, Dr Jessica Kurere, Dr Sharon Mulindi, Dr Immaculate Nkatha, Dr Cecelia Njoroge, Dr James Nyariki, Dr Shaleen Angweni, Dr Henry Emonje, Dr Emily Kilonzi, Dr Nick DeSouza, Dr Vanessa Maritim, Dr Gurpreet Singh, Dr Desmond Tutu.

Participants: Robert Muthini, David, Carla, Amy Rapp, Toby Otieno, Henry Lolosoli, Meibae Conservancy, Mary Wykstra, Cosmas Wambua, Sara Blake, Chris Lentaam, Adelaide Moturi, Timothy Maiyo, Learkeri Lbitiri, Kivoi Letongoine, Moses Lekirimui, Dominic Loltiantya, Maxwell Lemartile, Stephen Lemeleny, Lenamarker Lperuni, Lemartile Lmampoot, Lentaam Lkinoon, Lekamale, Lmatina Letinini, Lekalau, Alison Lolkinoyati, Leitore Edward, Leikar Isaac, Limaro Lbarakat, Seiyen Lolkinoyati, Marcelina Wambua, Kelvin Wambua, Daniel Lodung'okiok.

Vaccination #: 908 **Sterilizations #:** 27

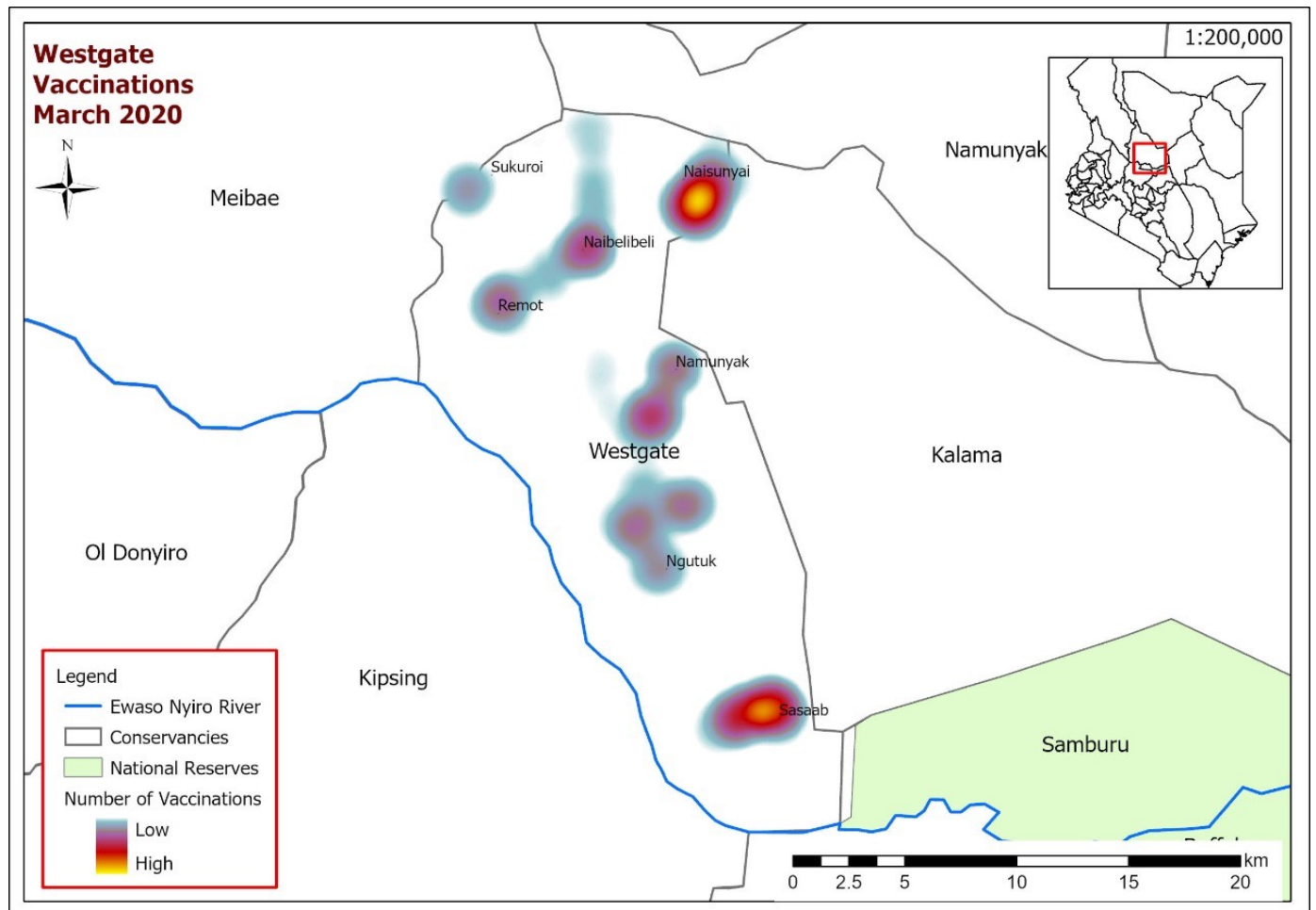
Vaccination efforts 3

Date: 16th, 17th, 18th March 2020

Area Name: Westgate Conservancy

Locations covered: Sasaab, Ngutuk Ongiron, Remot, Lempaute, Naisunyi, Sukuroi

Map of coverage:



Map produced by Ewaso Lions & Action for Cheetahs and cannot be re-printed without permission

Vets & Paravets: Dr Stephen Chege, Joseph Lolngogine, Dr Emily Kathambi

Participants: Jeneria Lekilelei, Laikos Letupukwa, Munteli Lalparasaroi, Lerimara, Lpuresi Lenawasai, Moses Lesumante, Jeremiah Letoole, Lkasian, Toby Otieno, Eunice Ljakunoi, Francis Lendorop.

Vaccination #: 437

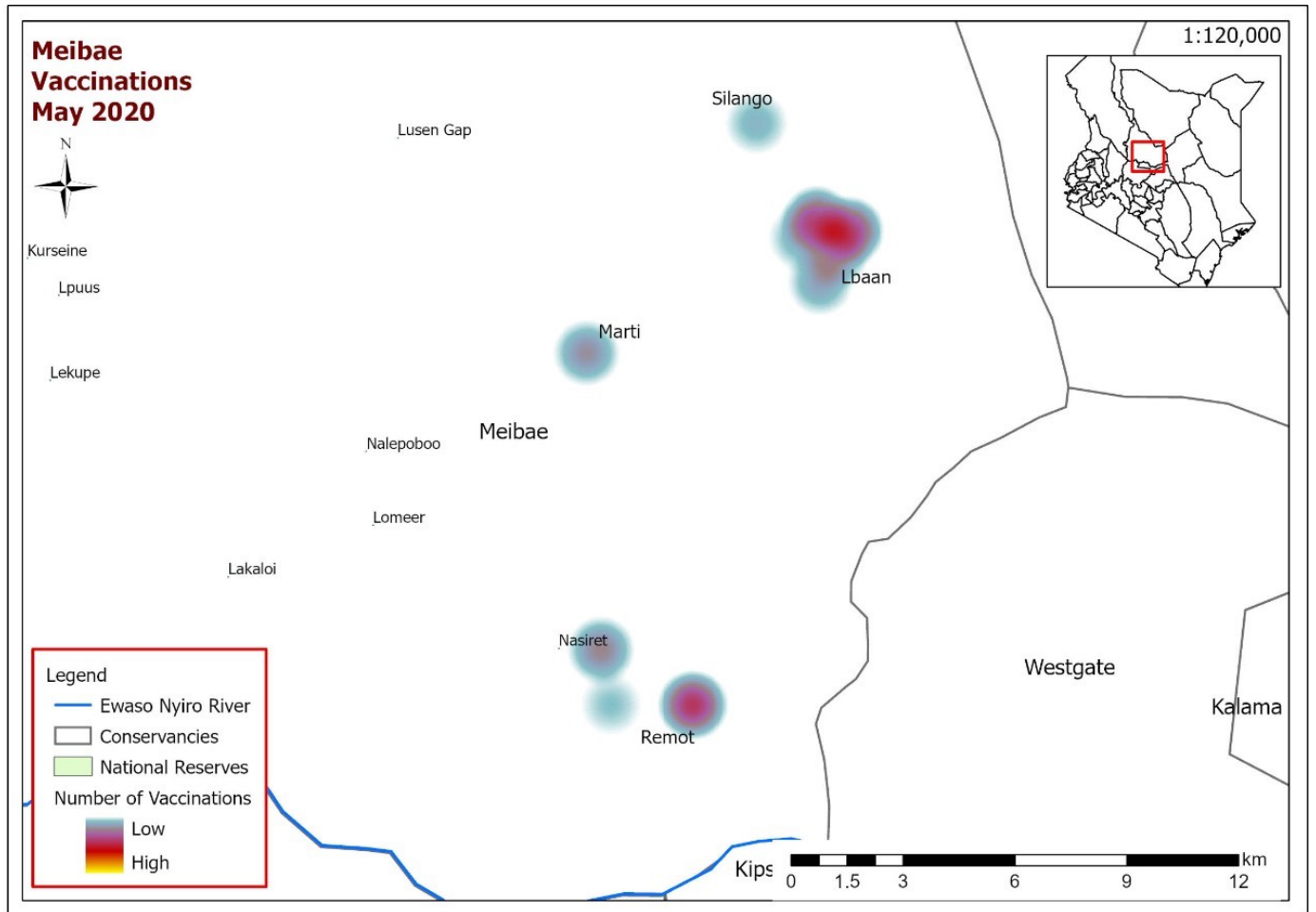
Vaccination efforts 4

Date: 27th & 28th May 2020

Area Name: Meibae Conservancy

Locations covered: Lekiji, Silango

Map of coverage:



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Vets & Paravets: Daniel Waturu, Dr Mohsin Likoniwalla.

Participants: Mary Wykstra, Chris Lentaam, Learkeri Lbitiri, Kivoi Letongoine, Moses Lekirimui, Maxwell Lemartile, Limaro Lbarakat, Seiyen Lolkinoyati, Daniel Lodung'okiok.

Vaccination #: 190

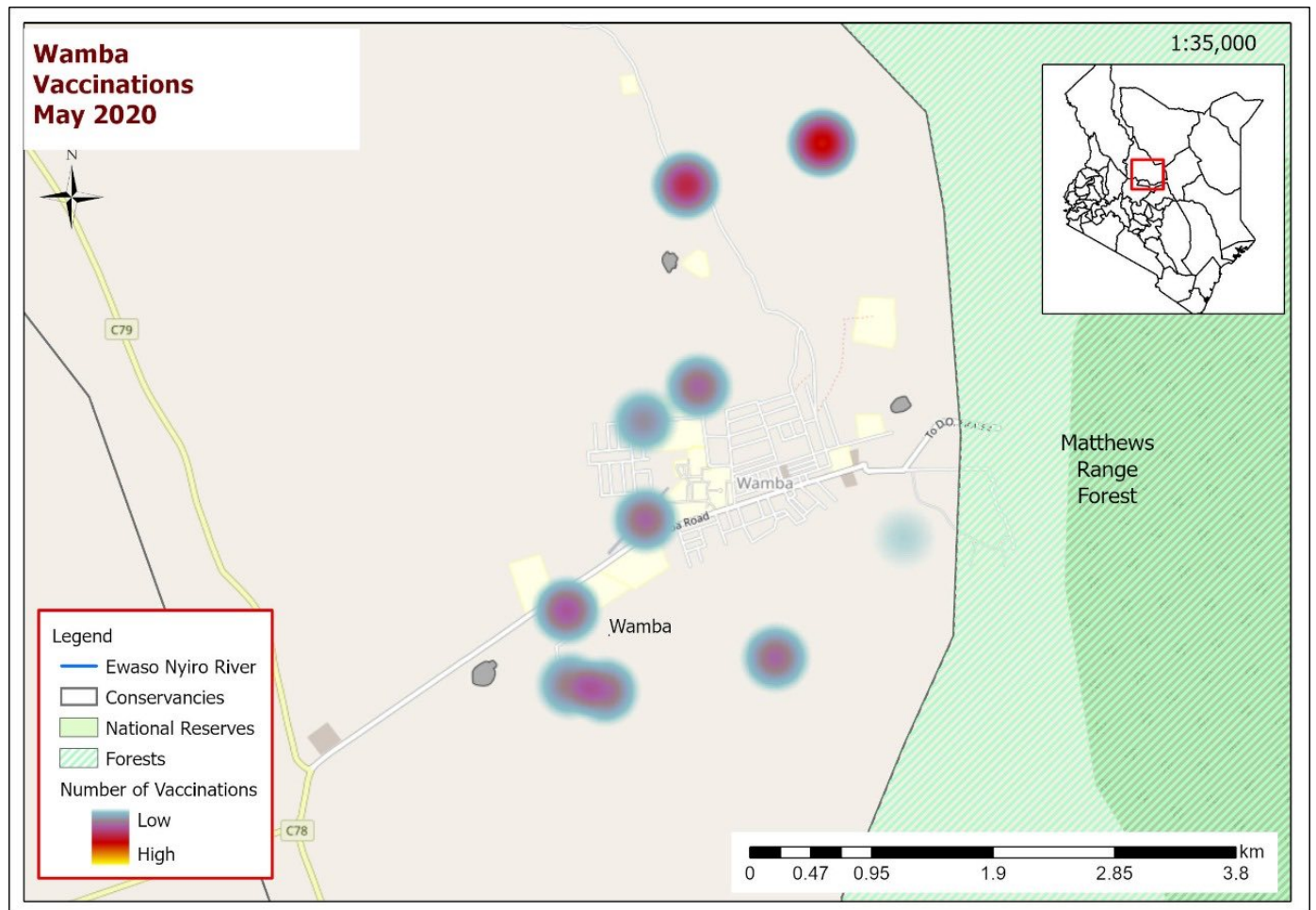
Vaccination efforts 5

Date: 29th, 30th, 31st May 2020

Area Name: Wamba town

Locations covered: Wamba, Milimani, Lolupa

Map of coverage:



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Paravet: Daniel Waturu

Participants: Mohamed Hussein

Vaccination #: 97

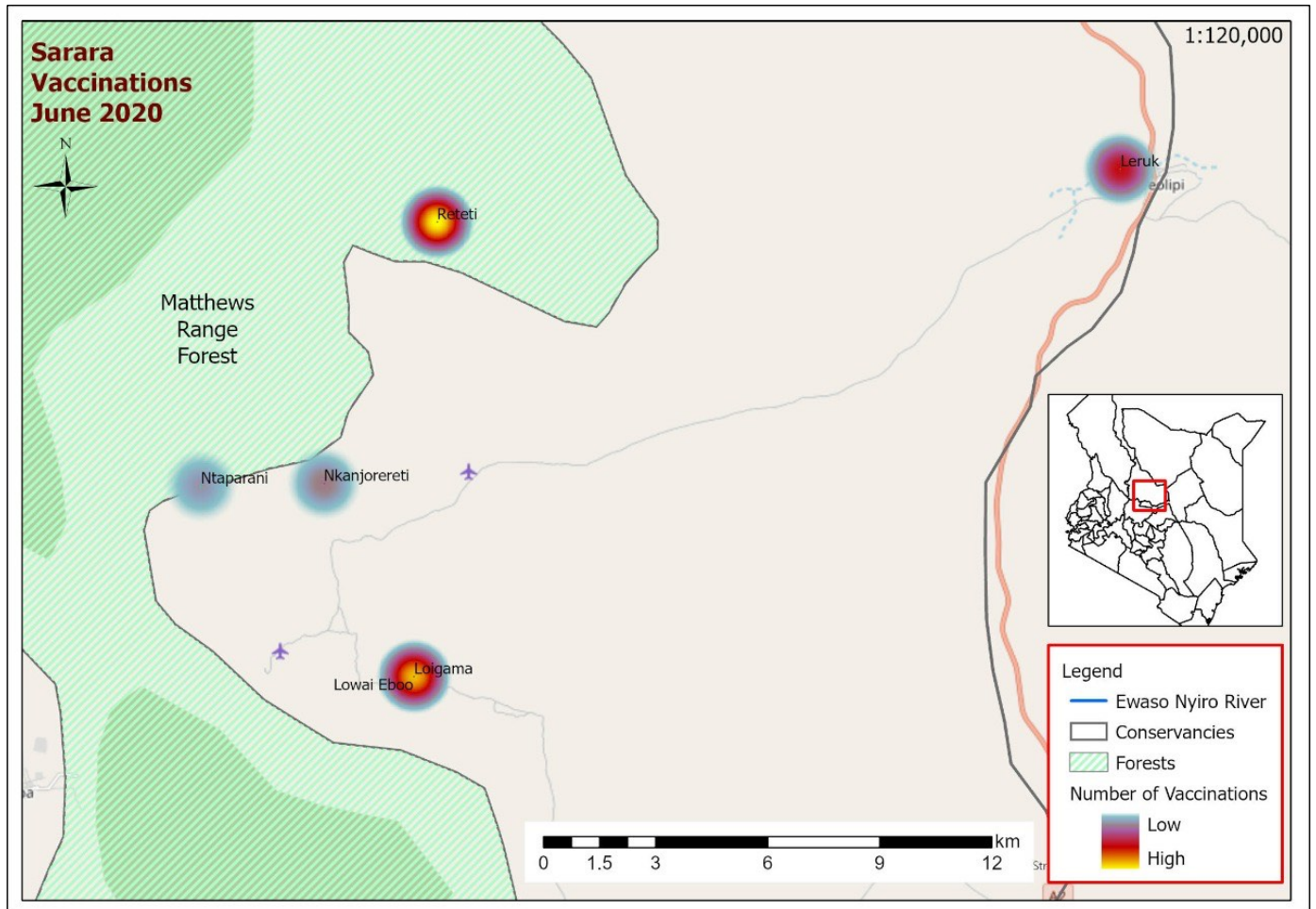
Vaccination efforts 6

Date: 9th, 10th, 11th June 2020

Area Name: Sarara

Locations covered: Reteti, Loigama, Leruk, Lowai Eboo, Nkanjoreteti, Ntaparani

Map of coverage:



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Vets & Paravets: Dr Stephen Chege, Joseph Lolngogine, Dr Emily Kathambi, Ian Ayugu

Participants: Kalamon Leogusa, Robert Lesampuri, Francis Lesirama, Adan Lemargeroy and Katie Rowe from Sarara Camp

Vaccination #: 175

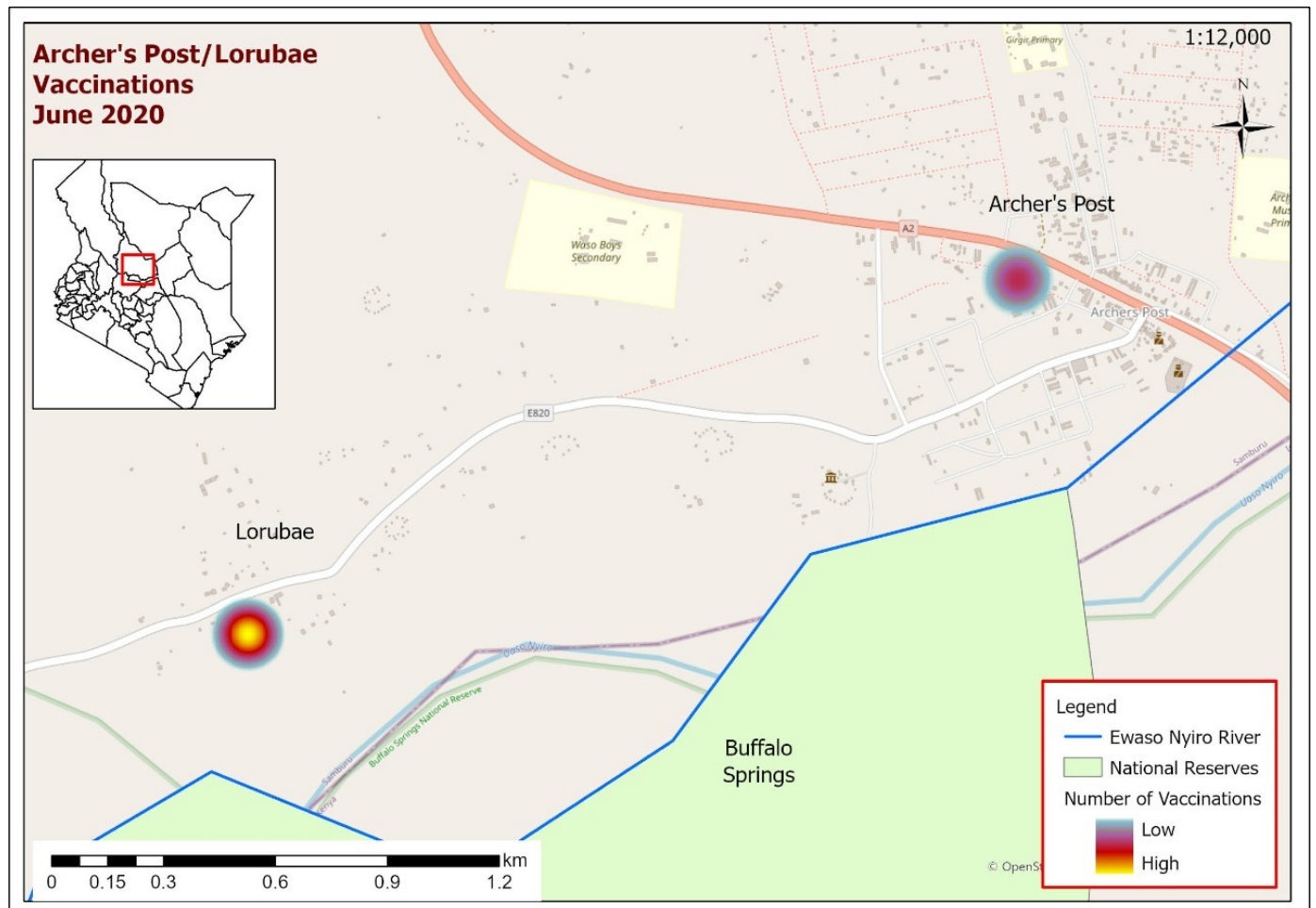
Vaccination efforts 7

Date: 17th & 18th June 2020

Area Name: Archers Post/Lorubae

Locations covered: Archers Post, Lorubae, Marti

Map of coverage:



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Paravets: Daniel Waturu

Participants: Peter Salumbe Leparporit

Vaccination #: 173

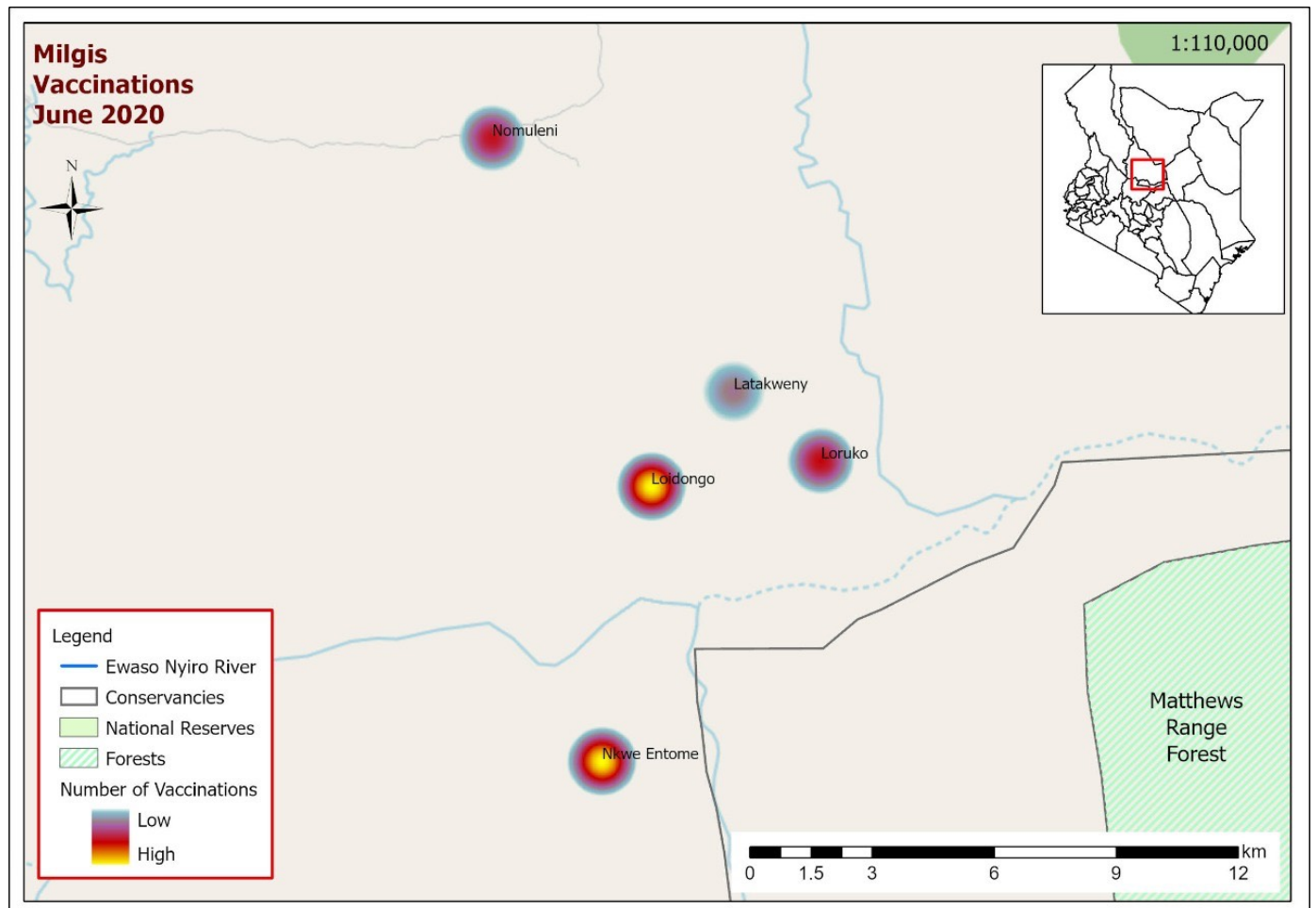
Vaccination efforts 8

Date: 19th, 20th & 21st June 2020

Area Name: Milgis region

Locations covered: Nkwe entome, Nomuleni, Loruko, Latakweny, Loidongo

Map of coverage:



Data from The Milgis Trust & Map produced by Ewaso Lions & Action for Cheetahs. Map cannot be re-printed without permission.

Vets Health Worker: Lpajas Lesolyia

Participants: Kennedy Lekimarere, Supukan Lesolyia, Digby Dufresne, Helen Dufresne- all from the Milgis Trust

Vaccination #: 132

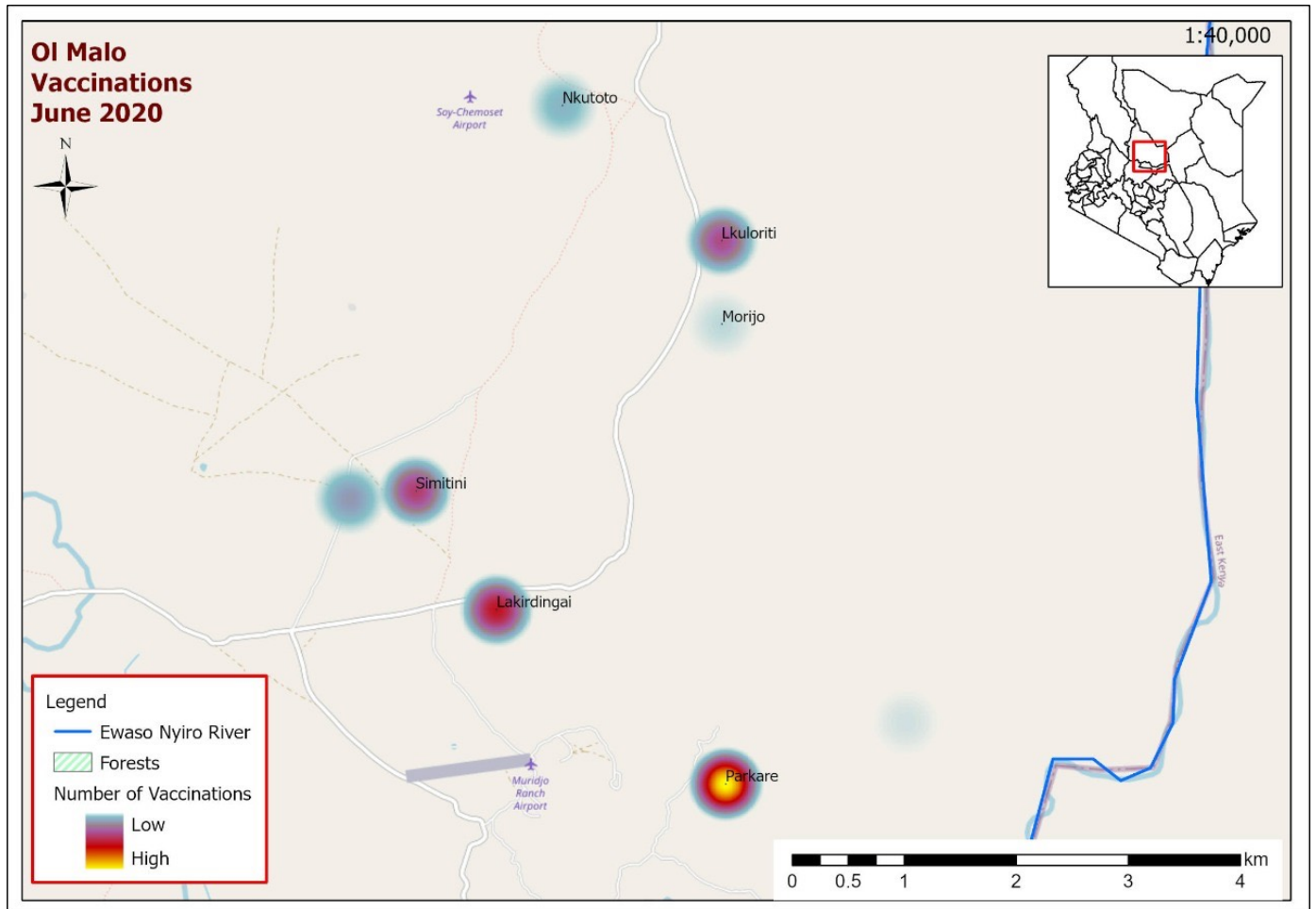
Vaccination efforts 9 - Laikipia

Date: 24th & 25th June 2020

Area Name: Ol Malo in Laikipia County

Locations covered: Parkare, Lakiringai, Simitini, Lkulatoriti, Nkutoto, Morijo

Map of coverage:



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Vets & Paravets: Dr Stephen Chege, Ambrose Longrot and Felix Mugo

Participants: Assistants from Ol Malo were Eliza, Patrick Gitonga, Chyulu Francombe, Meg Fey, Leprimu Lekulal. Samburu Trust participants included Solomon, Marti & Nicholas

Vaccination #: Vaccinations from this initiative: 200 distemper + 150 rabies
Additional vaccines donated to Ol Malo: 100 rabies (donated by Dedan Ngatia of the Laikipia Rabies Vaccination Campaign)