



SUPPLEMENTAL FIGURE 1. No significant relationship was observed between plague activity index (PAI, expected number infected individuals) and rodent host abundance.

SUPPLEMENTAL TABLE 1

Rodent abundance, diversity, and plague risk indices (PAI, expected number of seropositive rodents) for agricultural (agr) and conserved (cons) sites in research sites in northern Tanzania

	Kambi ya Nyoka		Manyara		Tloma	
	cons	agr	cons	agr	cons	agr
<i>Gerbilliscus robustus</i>	0	0	1	2	0	0
<i>Grammomys dolichurus</i>	3	0	0	0	12	0
<i>Graphiurus murinus</i>	2	0	0	0	1	0
<i>Lophuromys makundii</i>	31	0	0	0	4	0
<i>Lemniscomys striatus</i>	6	3	1	0	0	2
<i>Mastomys natalensis</i>	1	44	6	46	0	42
<i>Mus</i> spp.	2	11	0	0	0	6
<i>Praomys taitae</i>	19	0	0	0	11	0
No. of individuals	64	58	8	48	28	50
Rodent richness (Chao1)	7.0	3.0	3.9	2.0	4.0	3.0
Simpson	1.54	0.82	0.93	0.55	1.49	0.7
Shannon	1.35	0.68	0.74	0.17	1.12	0.53
No. of plague positive	2	1	1	4	0	4
No. of tested	23	17	4	26	16	20
Plague activity index	2.73	4.31	2.5	4.5	0.9	4.11

SUPPLEMENTAL TABLE 2

Seroprevalence for *Yersinia pestis* antibodies (the number positive versus the number tested) in rodent species caught in trapping grids in conserved and agricultural areas

Species	Agricultural	Conserved	Total
<i>Gerbilliscus robustus</i>	0/1	–	0/1
<i>Grammomys dolichurus</i>	–	1/10	1/10
<i>Graphiurus murinus</i>	0/2	–	0/2
<i>Lemniscomys striatus</i>	0/2	0/2	0/4
<i>Lophuromys makundii</i>	–	2/15	2/15
<i>Mastomys natalensis</i>	9/57	0/5	9/62
<i>Mus</i> spp.	0/1	–	0/1
<i>Praomys taitae</i>	–	0/11	0/11

SUPPLEMENTAL TABLE 3

Host–flea associations (percent of all identified fleas), and overall intensity of infestation per habitat type per host species

Species	<i>Lemniscomys striatus</i>	<i>Lophuromys makundii</i>	<i>Mastomys natalensis</i>	<i>Praomys taitae</i>
<i>Ctenophthalmus calceatus cabirus</i>	2%	4%	4%	2%
<i>Ctenophthalmus evidens</i>	–	12%	–	–
<i>Ctenophthalmus</i> sp.	–	8%	–	–
<i>Dinopsyllus longifrons</i>	2%	10%	–	–
<i>Dinopsyllus lypusus</i>	–	–	35%	–
<i>Leptopsylla aethiopica</i>	–	–	–	2%
<i>Listropsylla basilewskyi</i>	–	–	2%	2%
<i>Xenopsylla brasiliensis</i>	–	–	12%	–
<i>Xenopsylla humilis</i>	–	–	2%	–
Intensity (agriculture)	0.2 ± 0.4	0.2 ± 0.4	0.2 ± 0.4	–
Intensity (conserved)	0.3 ± 0.5	–	0.1 ± 0.4	0.1 ± 0.3