Spatial ecology of the Endangered and endemic Sagalla caecilian *Boulengerula niedeni* in the Eastern Arc Mountains of Kenya

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Appendix S1.

Table S1. Detailed list of environmental variables recorded

Variable	Units	Accuracy (±)	Measuring tool
Air temperature	°C	0.1	ThermaPen, Electronic Temperature Instruments Ltd,
Soil temperature	°C	0.1	ThermaPen, Electronic Temperature Instruments Ltd,
Soil pH	0-14 pH scale	0.5	Mudder 3-in-1 Moisture/pH/Light meter
Soil moisture	0-10 scale	1	Mudder 3-in-1 Moisture/pH/Light meter
Soil compaction	Tonnes per square foot	0.5	Humboldt H-4200 Soil Penetrometer
Litter cover	0-100% in increments of 20%	0-20% 20-40% 40-60% 60-80% 80-100%	Estimated by eye
Canopy cover	0-100% in increments of 20%	0-20% 20-40% 40-60% 60-80% 80-100%	Estimated by eye
Max litter depth	Centimetres	0,5	Standard haberdashery tape
Caecilian length	Millimetres	5	Standard haberdashery tape
Caecilian weight	Grams	0.2	Pesola Light Line Spring Scale, 20g
GPS location	DD.DDD	3-10m	Garmin eTrex10
Elevation	Metres above mean sea level	3-10m	Garmin eTrex10
Soil type	Categorical	Standard combinations of	Estimated by touch

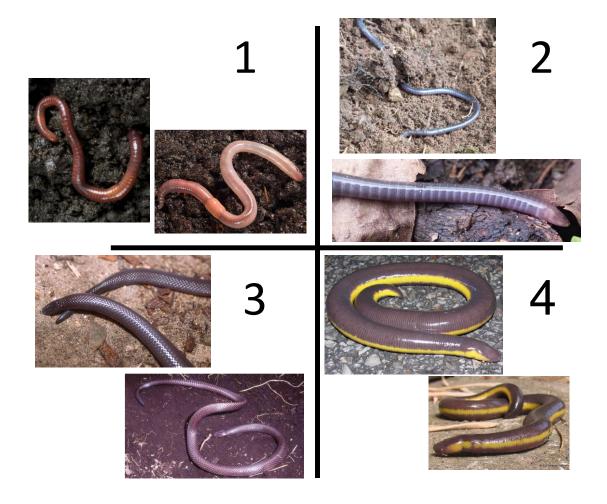|		sandy, silty, loamy, and clay	
Dominant weather	Categorical	1. Mostly sunny 2. Mostly cloudy 3. Raining	Estimated by eye
Land use type	Categorical	1. Agricultural 2. Anthropic 3. Natural	Estimated by eye
Landowner prediction of caecilian presence	Presence/absence	n/a	Collected via conversation with landowners

Figure S1. Images used to assess landowners' recognition of the Sagalla caecilian, prior to collecting data on predicted caecilian presence

Justification for images selected

Quadrat 1 includes two pictures of a common earthworm (phylum *Annelida*), selected to offer views under different lighting conditions against soil, as it would most frequently be encountered.

Quadrat 2 includes two pictures of the Sagalla caecilian *Boulengerula niedeni*, one close up so as to reveal the distinctive annular grooves and skin coloration, and one slightly removed so as to show the general form against the soil.

Quadrat 3 includes two pictures of a regionally common *Amblyodipsas spp.* snake, one close up to reveal the scales distinctive of snakes, and one from further to show the general body shape and give an indication of size.

Quadrat 4 included two pictures of a Southeast Asian *Icthyophis spp.* caecilian, selected due to its superficial similarity to the Sagalla caecilian, while displaying two glaring morphological differences: first and most obviously, a bright yellow band along the entire length of its body, and secondly a lack of annular grooves. The inclusion of this species on the poster was intended to identify unreliable respondents, who would impossibly claim to find this foreign species on their land. Given that some past surveys or scientific data collections have offered rewards for participation, it is conceivable that certain landowners may feel inclined to falsely claim presence of the target species on their land, in the hopes of possible future rewards. Quadrat 4 was therefore an attempt at reducing the number of false-positives in the survey data.