

ARTICLE

Substantiating freedom from parasitic infection by combining transmission model predictions with disease surveys

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A

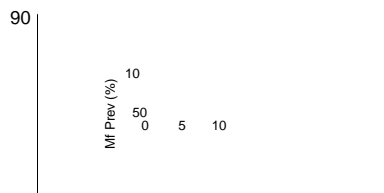
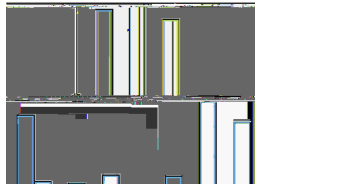
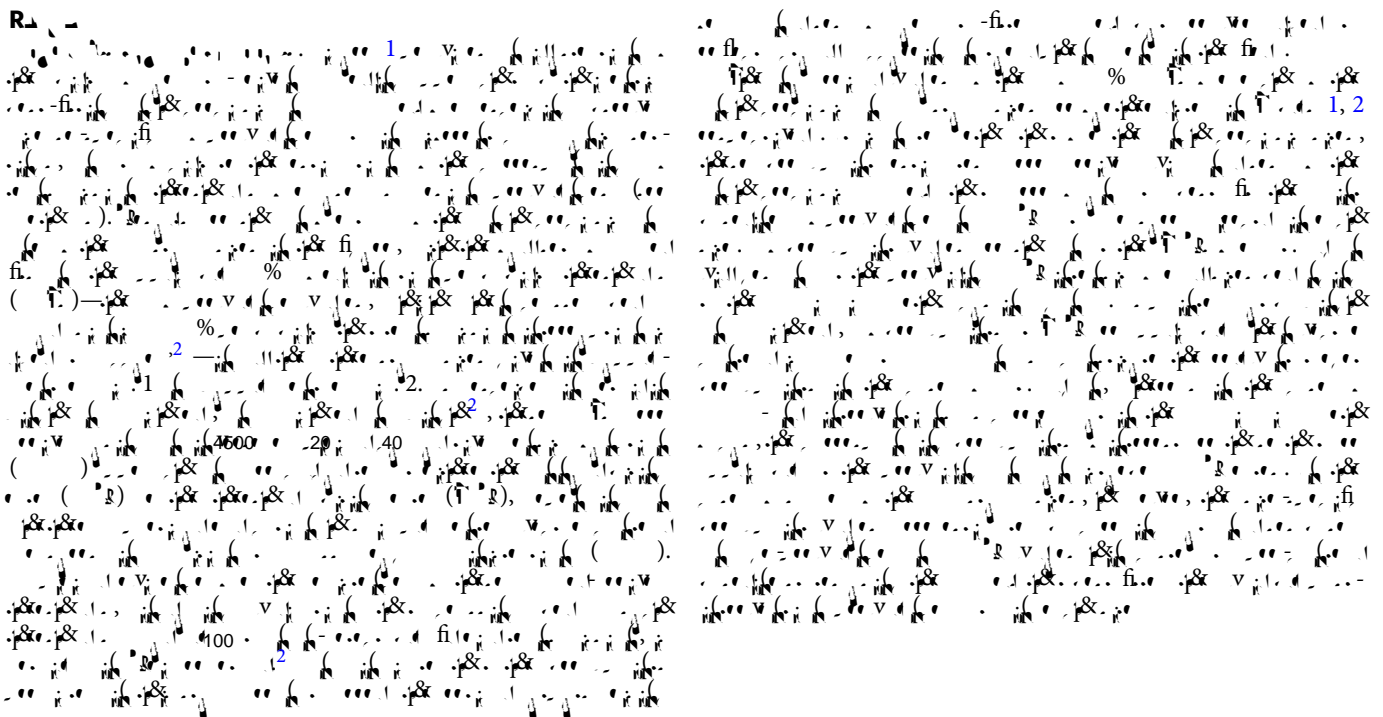
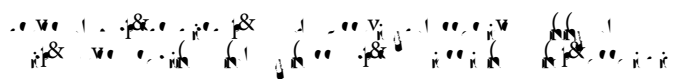


Fig. 1 Model fits and estimated transmission breakpoints. The model fits (grey curves) to baseline microfilariae prevalence from two onchocerciasis endemic sites, **a** Buriri, Uganda and **b** Masaloa, Uganda, and one LF endemic site **c** Gbuwhen, Nigeria, are shown. For Buriri and Masaloa, age-stratified Mf prevalence patterns (shown in the figure as red squares for estimated plateau-type patterns with error bars representing the 95% binomial confidence intervals) used for fitting were constructed according to the reported community-level Mf prevalence (Tables 1, 2). For Gbuwhen, the model was fit to post-intervention data (shown in the figure as blue squares)





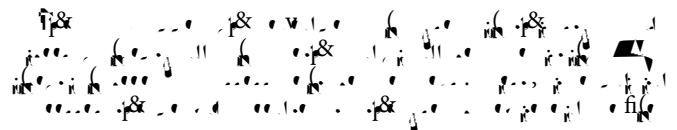
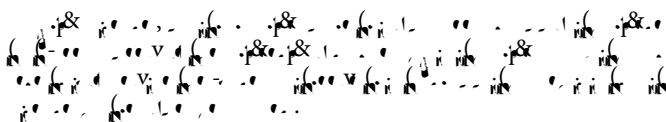
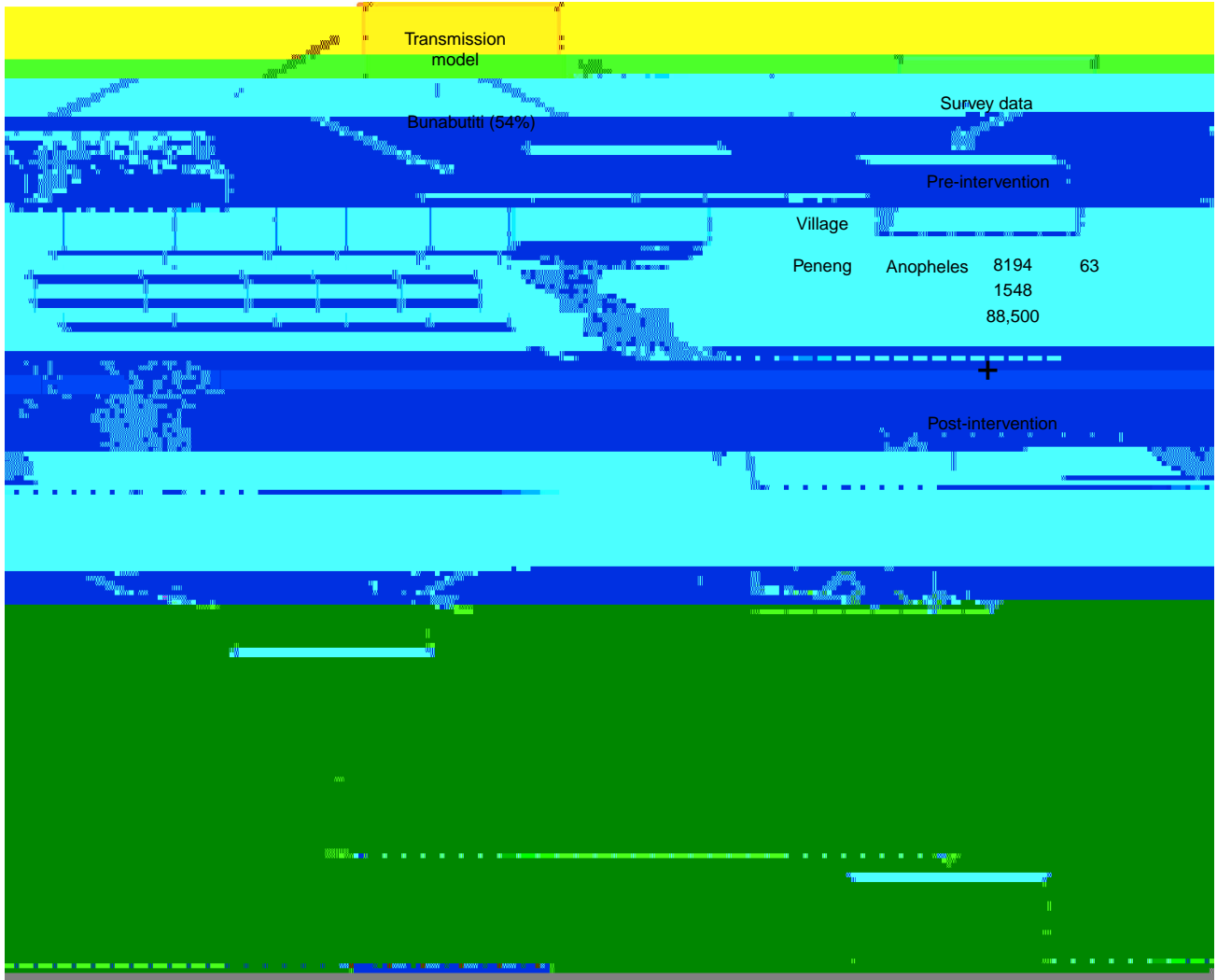
N ₁ (%)	V ₁ (%)	Y ₁	T ₁ (%)	a ₁ (%)	N ₂ (%)	d ₂ (%)	N ₃ (%)	M ₁ (%)	M ₂ (%)	R ₁ (%)	(d ₁ / d ₂)	a ₂ (%)	c ₁ (%)	c ₂ (%)	95% EP	ABR
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Nasarwa	Gbuwhen ^b															
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This image shows a page of musical notation for piano, consisting of approximately 12 staves. The notation includes various musical symbols such as notes, rests, and dynamic markings. Key annotations include:

- A blue number "3" in parentheses, appearing twice: once on the third staff and once on the eighth staff.
- A blue number "30-3" at the bottom left of the page.
- Dynamic markings such as "f" (forte) and "ff" (fortissimo) scattered throughout the score.
- Other markings include "v" (accents), "&" (articulation marks), and ">" (accents).



21,3-41

40

2

21,3-41

11,1 1 23,42-44

21,41

4

23

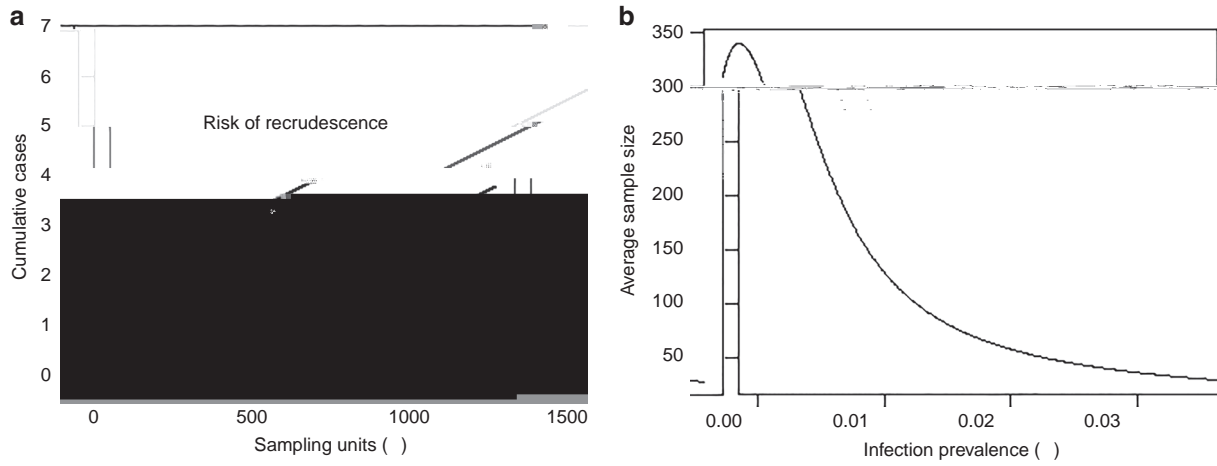
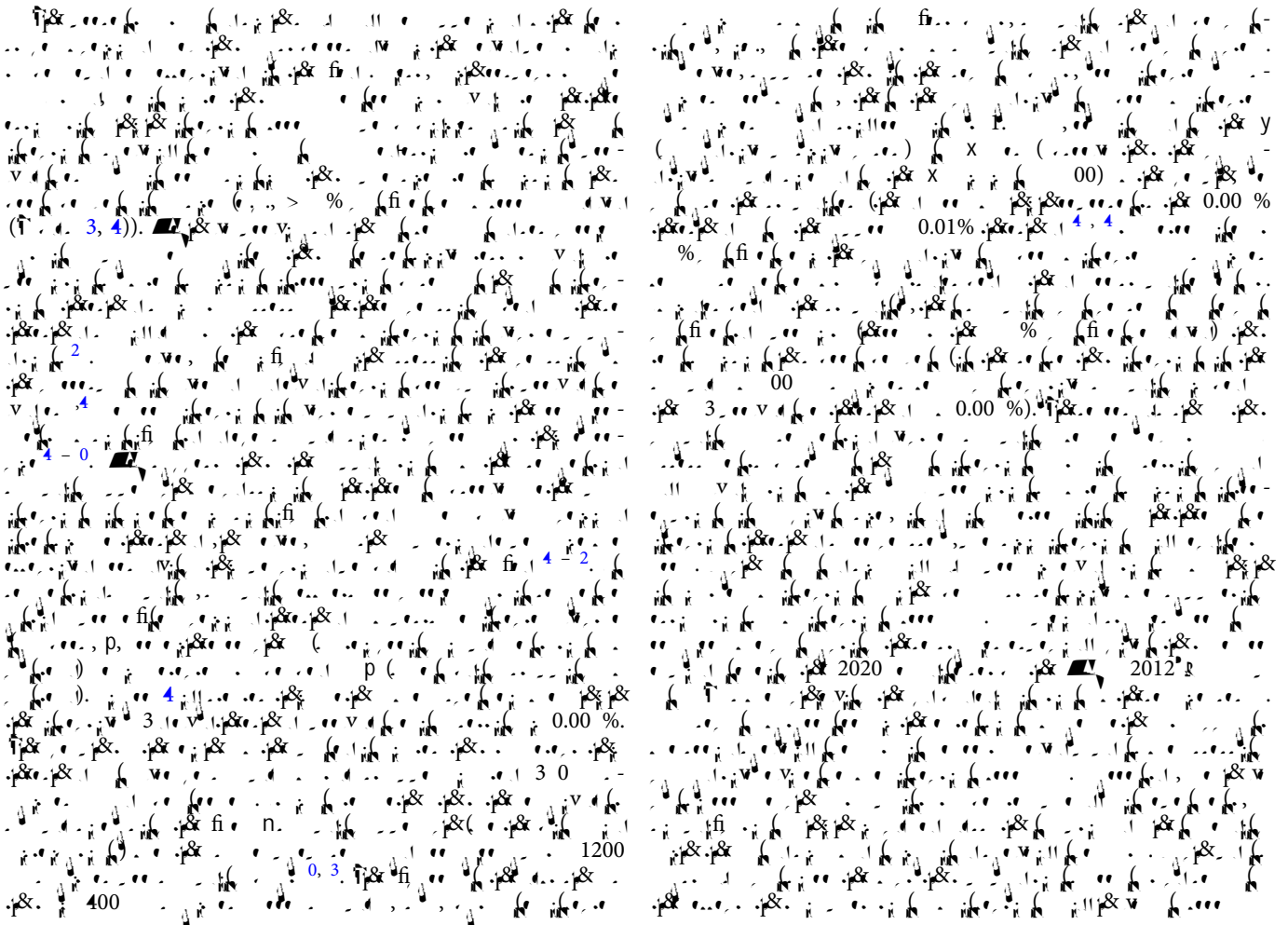


Fig. 4 Sequential entomological sampling for classification. **a** Stop lines corresponding to a Wald's sequence probability ratio test (SPRT)⁷¹ sampling plan for classification based on entomological infection thresholds, as measured by simple random sampling of vectors. Results for a scenario with $p_0 = 0.00005$ (= 95% EPT L3 prevalence threshold) and p_1



Musical score for a string quartet. The score consists of multiple staves with complex notation, including slurs, dynamics (f), and articulation marks (v). The notation is dense and includes various rhythmic values and accidentals.

Key annotations in the score include:

- A blue "2" marking above a staff.
- A blue "1, 2, 4-2" marking above a staff.
- A blue "3" marking above a staff.
- Measure numbers (1) and (2) in parentheses below a staff.

M. d

Cac a % % c % d bab % % d

Musical score for a string quartet. The score consists of multiple staves with complex notation, including slurs, dynamics (f), and articulation marks (v). The notation is dense and includes various rhythmic values and accidentals.

Key annotations in the score include:

- A blue "1" marking above a staff.

1 2 3

$(P(a, t))$, $(W(a, t))$, $(M(a, t))$, (L)

$$\begin{aligned} \frac{\partial P}{\partial t} + \frac{\partial P}{\partial a} &= \Phi L^* F_1(l(a, t)) F_2(W_f(a, t)) \\ &\quad - \mu_w P(a, t) - \Phi L^* F_1(l(a, t - \tau)) F_2(W_f(a, t - \tau)) \zeta \\ \frac{\partial W}{\partial t} + \frac{\partial W}{\partial a} &= \Phi L^* F_1(l(a, t - \tau)) F_2(W_f(a, t - \tau)) \zeta - \mu_w W(a, t) \\ \frac{\partial M}{\partial t} + \frac{\partial M}{\partial a} &= F_3(W_f(a, t)) - M(a, t) \\ \frac{\partial l}{\partial t} + \frac{\partial l}{\partial a} &= W_f(a, t) - l(a, t) \\ L^* &= F_4(W_f(a, t)) \end{aligned} \quad ()$$

2 3

F_x

43. Post-border surveillance techniques: review, synthesis and deployment. Australian Centre of Excellence for Risk Analysis (ACERA) Report 1004 (2012).