Measles on the Edge: Coastal Heterogeneities and Infection Dynamics
Supporting Information File #1
Residuals from 'proportion of fadeouts against log population size' against log
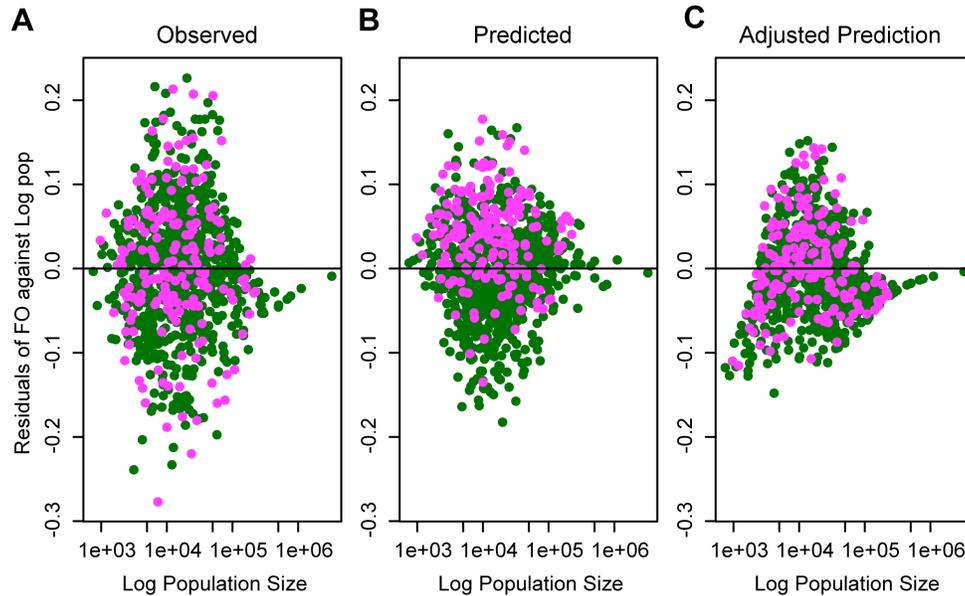population size

Figure S1 Residuals from 'proportion of fadeouts against log population size' against log
population size
The center panel *(b)* shows that the gravity model predicts a strong bias for coastal towns
of all population sizes to fadeout more than the data show *(a)*. The panel on the right *(c)*
shows that our model adjustment corrects for this bias and the distribution of predicted
coastal fadeouts is similar to that of inland towns. Inland in dark green, coast in magenta.

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Supporting Information File #2
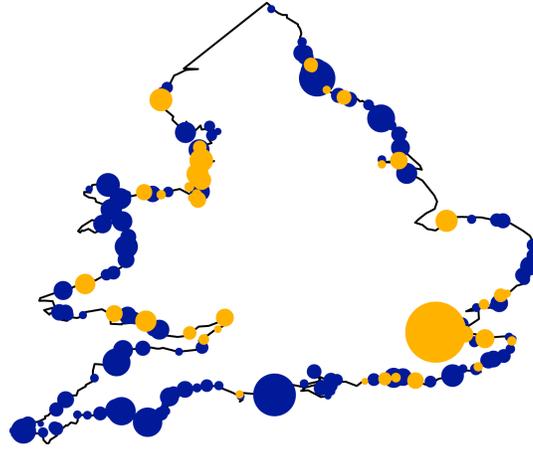Spatial distribution of coastal fadeouts from model predictions

Figure S2 Spatial distribution of coastal fadeouts from model predictions
Navy dots show coastal towns that the model predicts will fade out more than the average number of predicted fadeouts. Yellow dots show the towns that are predicted to fade out less than the average number of predicted fadeouts. The navy dots are found along all sections of the coast and do not reveal any spatial pattern. Similarly, the yellow dots show no spatial clustering. This shows that the model is not spatially biased in its predictions. The size of each dot is proportional to population size.

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Supporting Information File #3
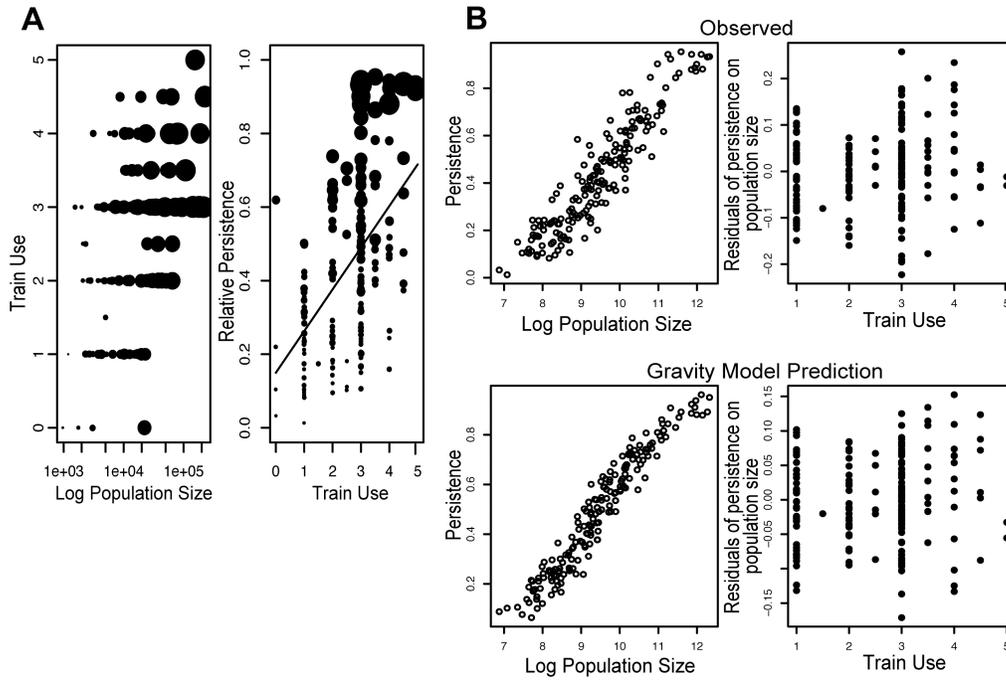Measles persistence, population size, and train use along the coast

Figure S3 Measles persistence, population size, and train use along the coast
(a) Left: Train use against log population size for each coastal town. Size of dot reflects relative persistence. Right: Relative Persistence against train use, size of dots reflect population size.
(b) The top two panels show the data. Left: Log of population size is strongly correlated with persistence. Right: The effect of train use on the residuals of persistence on population size is not significant (P = .08279). The bottom two panels show the gravity model predictions. Left: Log of population size is strongly correlated with persistence. Right: The effect of train use on the residuals of persistence on population size is not significant (P = .08191).