

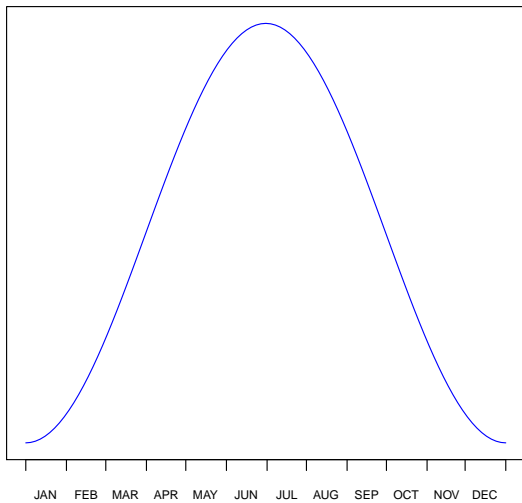
Slightly Less Simple Mosquito Modeling

Carl A. B. Pearson

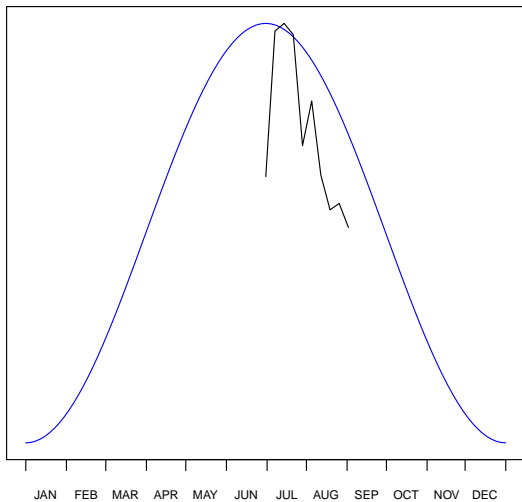
Emerging Pathogens Institute, University of Florida

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Mosquito Abundance



Mosquito Abundance



Emphasis: Simple

comparison of continuous, spatially homogenous models

Why?

understanding of infection trends can inform interventions, health system preparations, *etc.*

Common Mosquito Model

TODO sine

...vs. Common Mosquito Abundance

TODO overlay mosquito pops with sine, match peaks

So, Low Hanging Fruit

preview: no sophisticated analysis to pick said fruit
but these basic analyses provide fertile ground for much more
quantitative detail

1. useful to write models in terms of measurable parameters,
2. measurable parameters are not scale-free,
3. mathematics is more useful when scale free, therefore
4. dimensional analysis is awesome