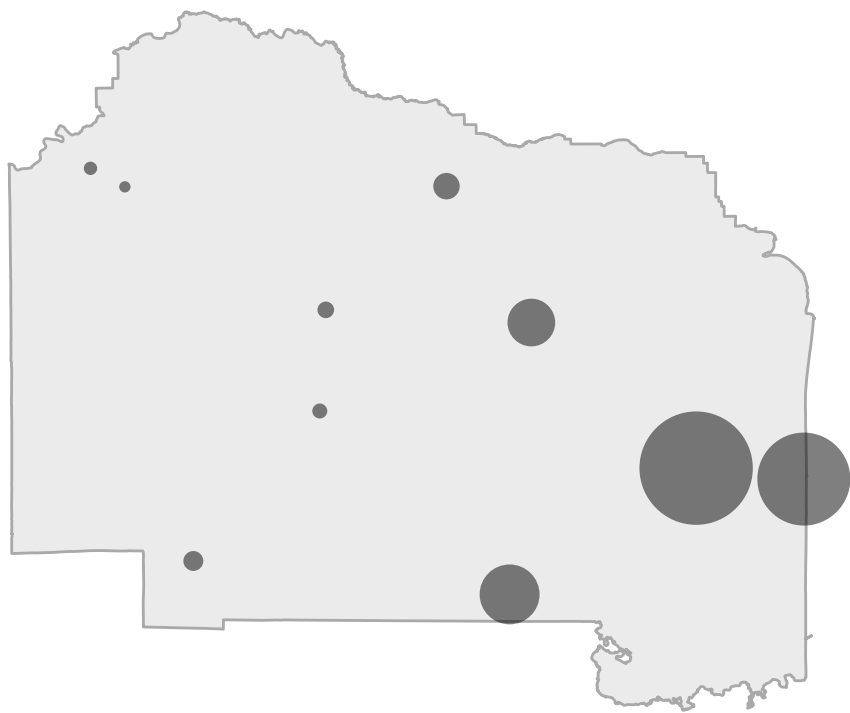


Weekly Mosquito Surveillance and Forecast Report

Florida Department of Health in Alachua County

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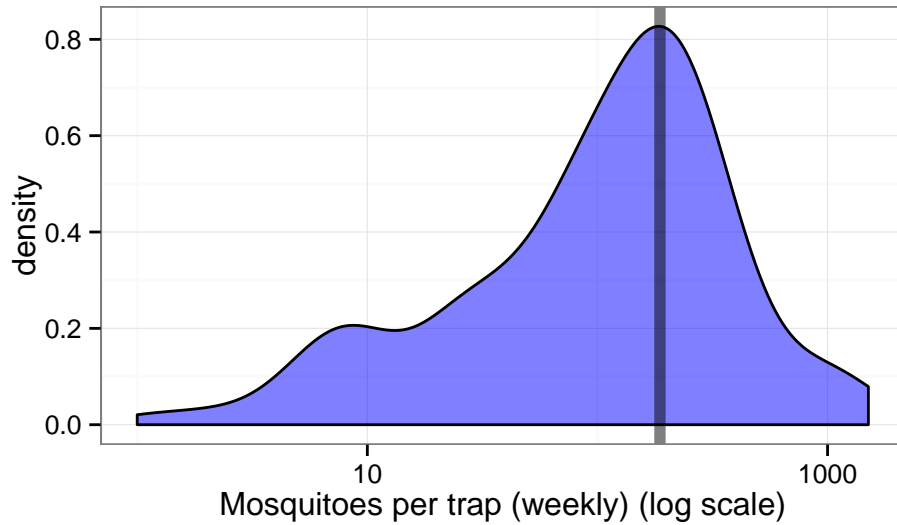


Joe Brew
Ben Brew
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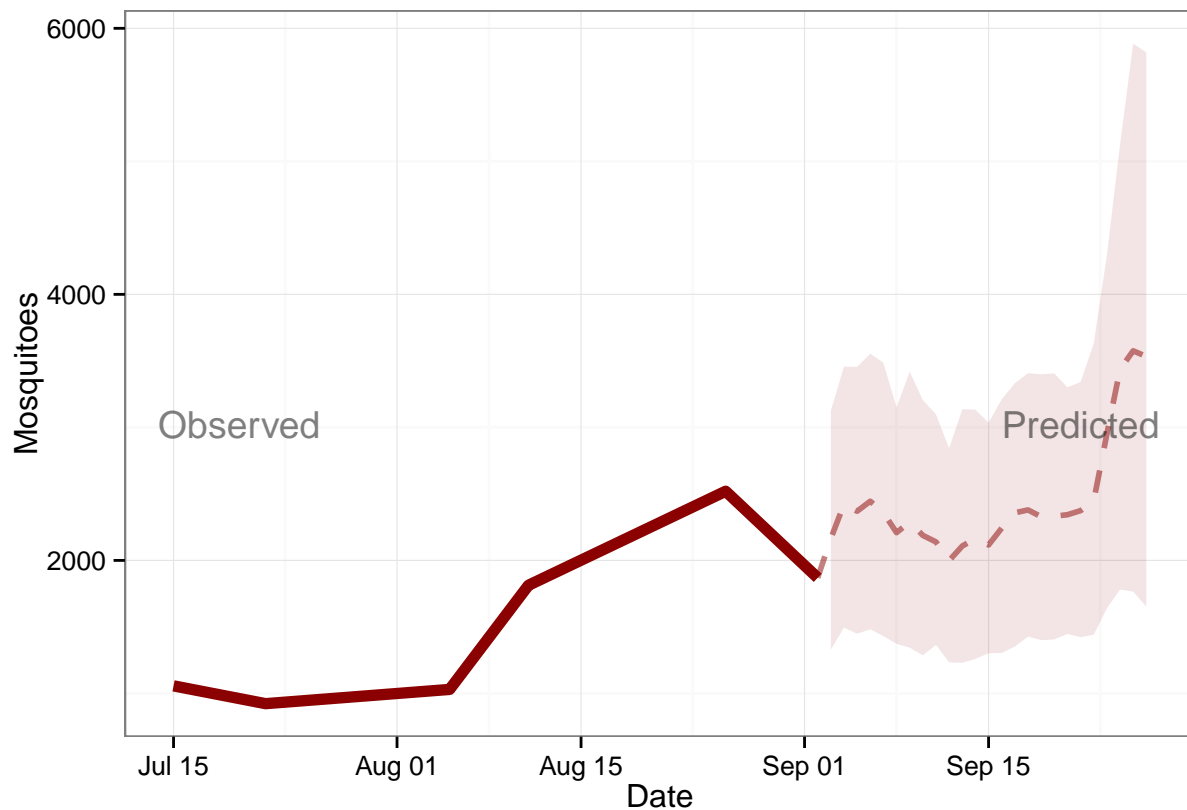


Overview

The most recent trap collection was on September 02, 2015. The 1869 mosquitoes trapped (approximately 187 per trap) is at the 63 percentile of all historical trappings.

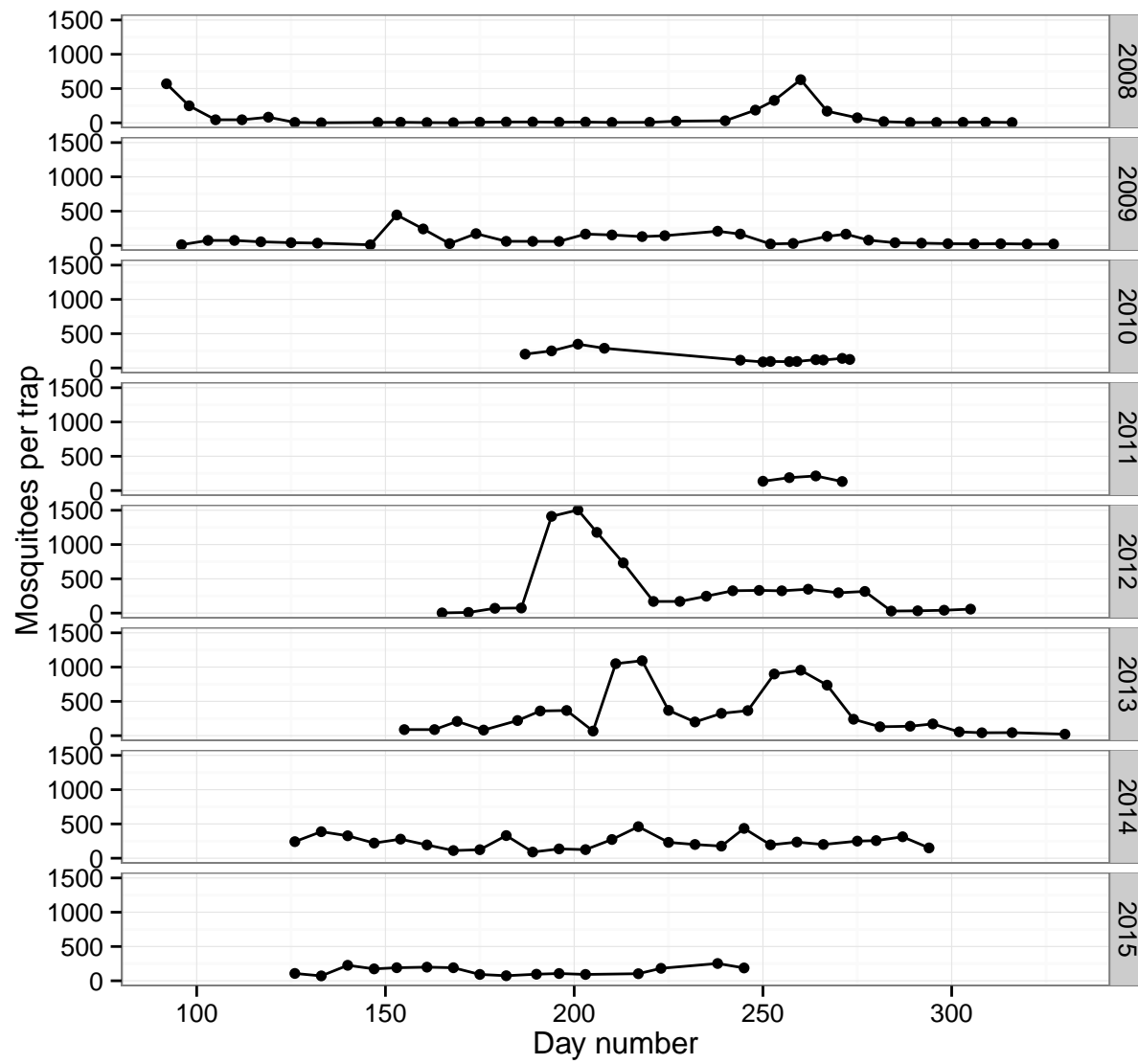


The number of mosquitoes declined slightly in the most recent trapping, perhaps due to heavier than usual recent precipitation. The predictive model suggests a slight rise going forward in September.



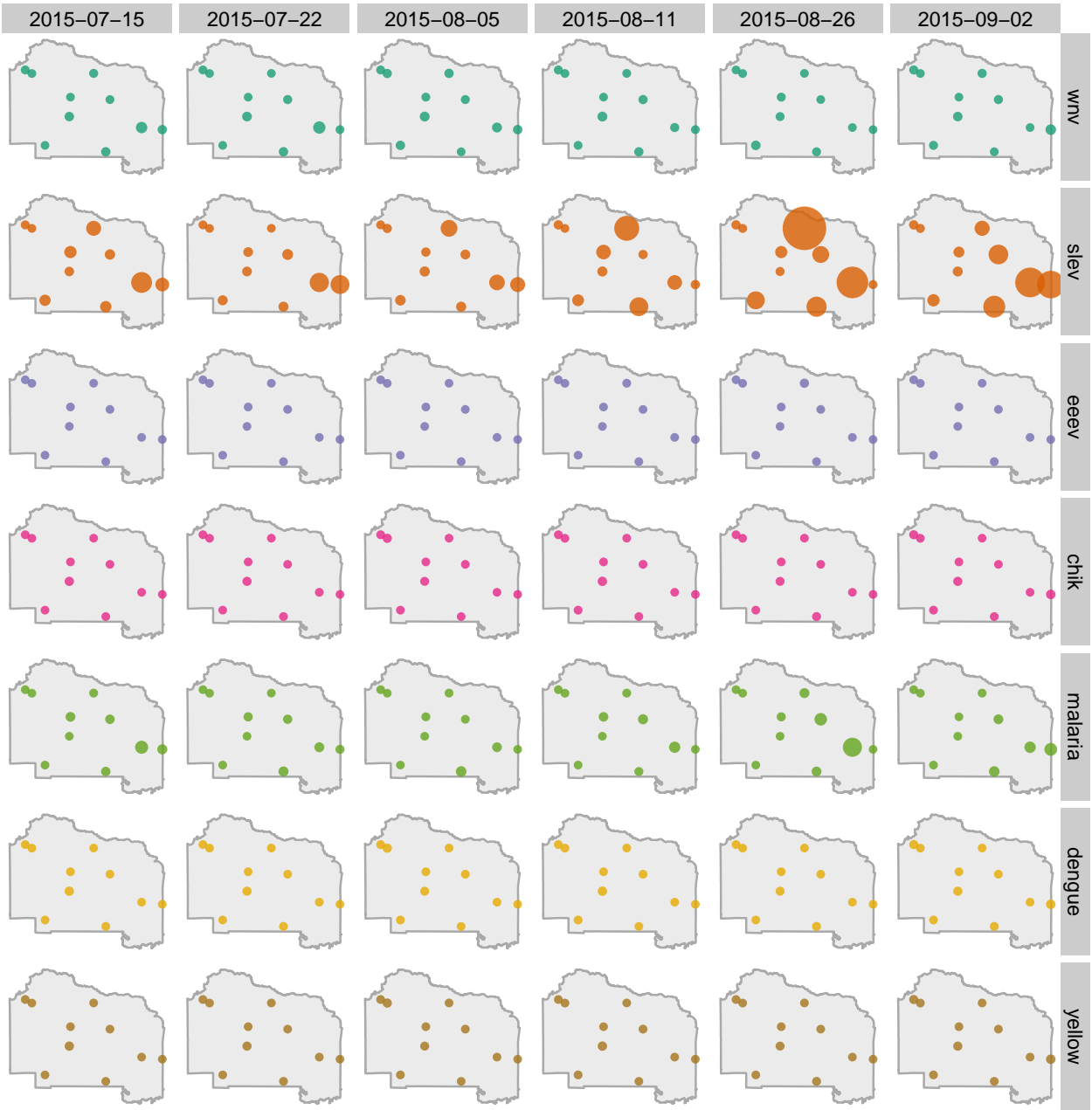
Historical perspective

Numbers so far this summer have been relatively low compared to previous summers.



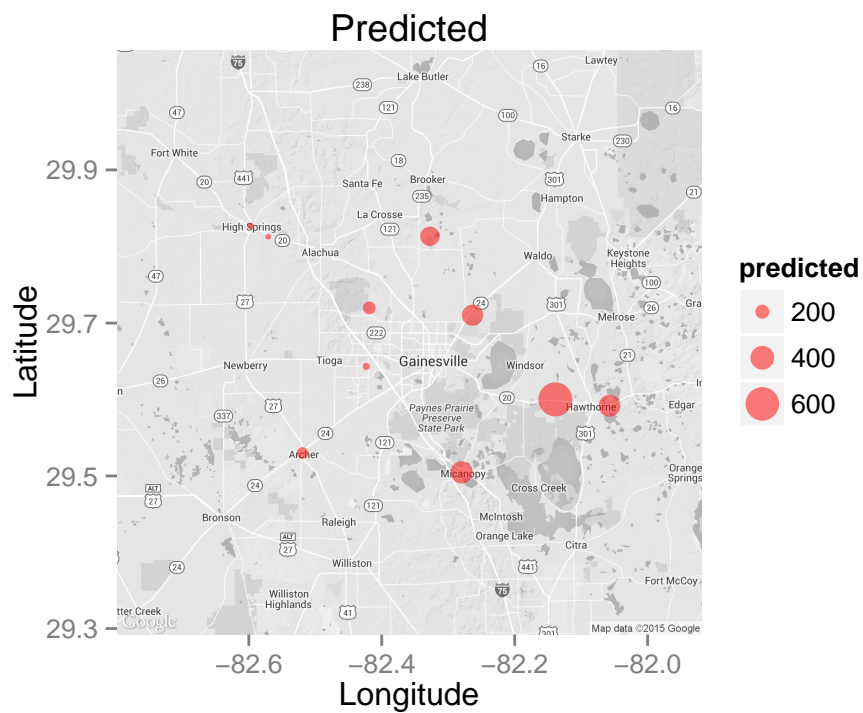
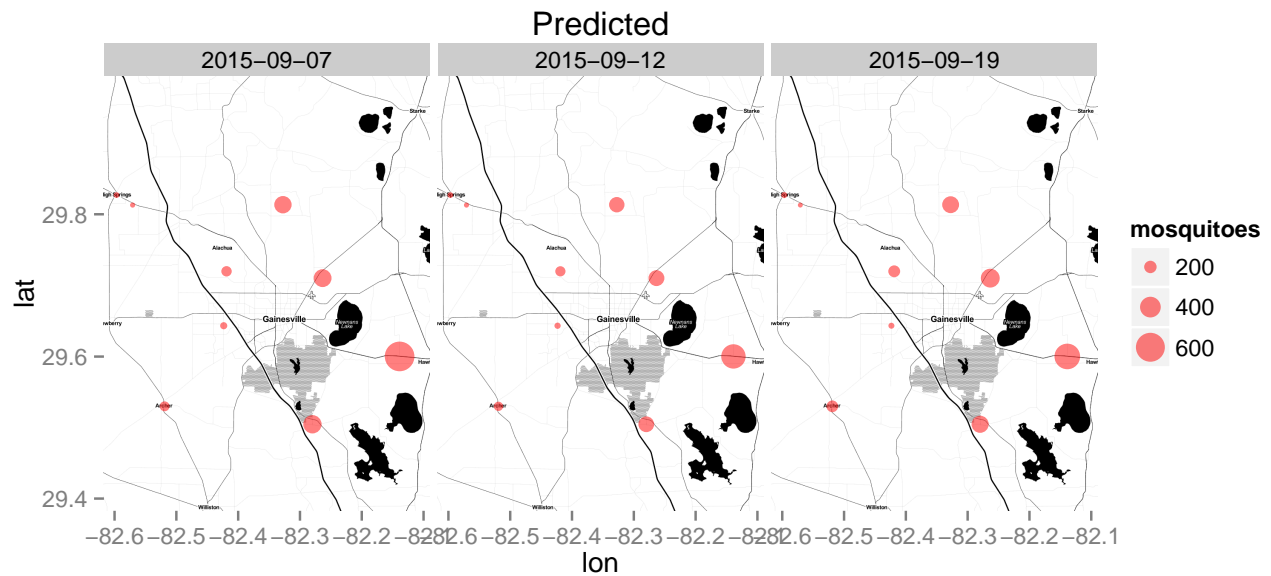
Disease details

Vectors of diseases of concern appear relatively evenly distributed throughout the county. In recent weeks, the number of mosquitoes capable of carrying SLEV has increased slightly.



Forecast

Over the next two weeks, we predict the mosquito population to grow slightly, with the greatest growth occurring in the east of the county.



Model details

The forecast model has undergone several improvements since last year. The inputs have been substantially expanded (now taking into account humidity, precipitation, wind speed, temperature and its fluctuations), and the model has been improved (in lieu of linear regression, the predictive model now employs ensemble machine learning methods).

The model is cross-validated and backtesting confirms a decent fit.

