

# Risk based surveillance of vector borne infections

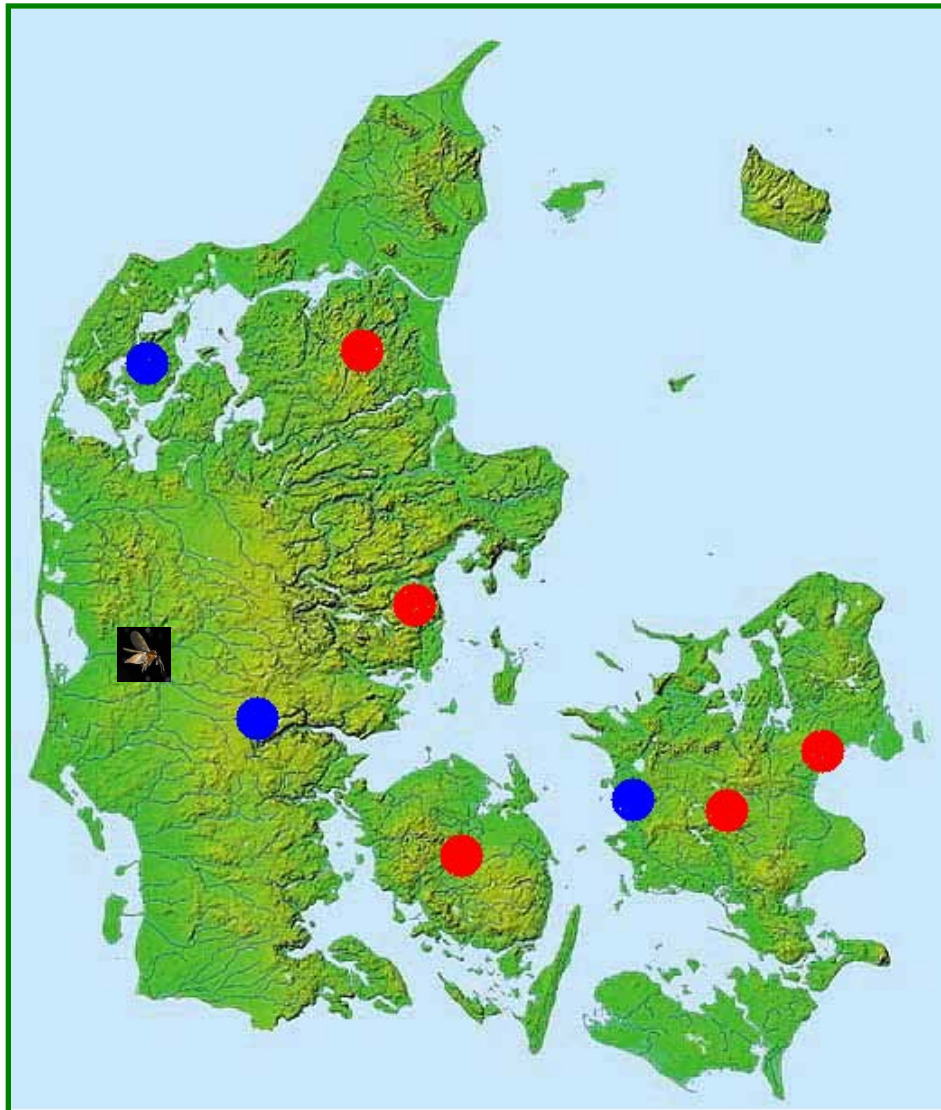
## – the daily transmission potential of Schmallenberg virus in Denmark 2013 to 2016

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 FVST (National Food and Veterinary Administration)  
 EMIDA VICE



NKVet.  
 Oslo 11-12<sup>th</sup> January 2017

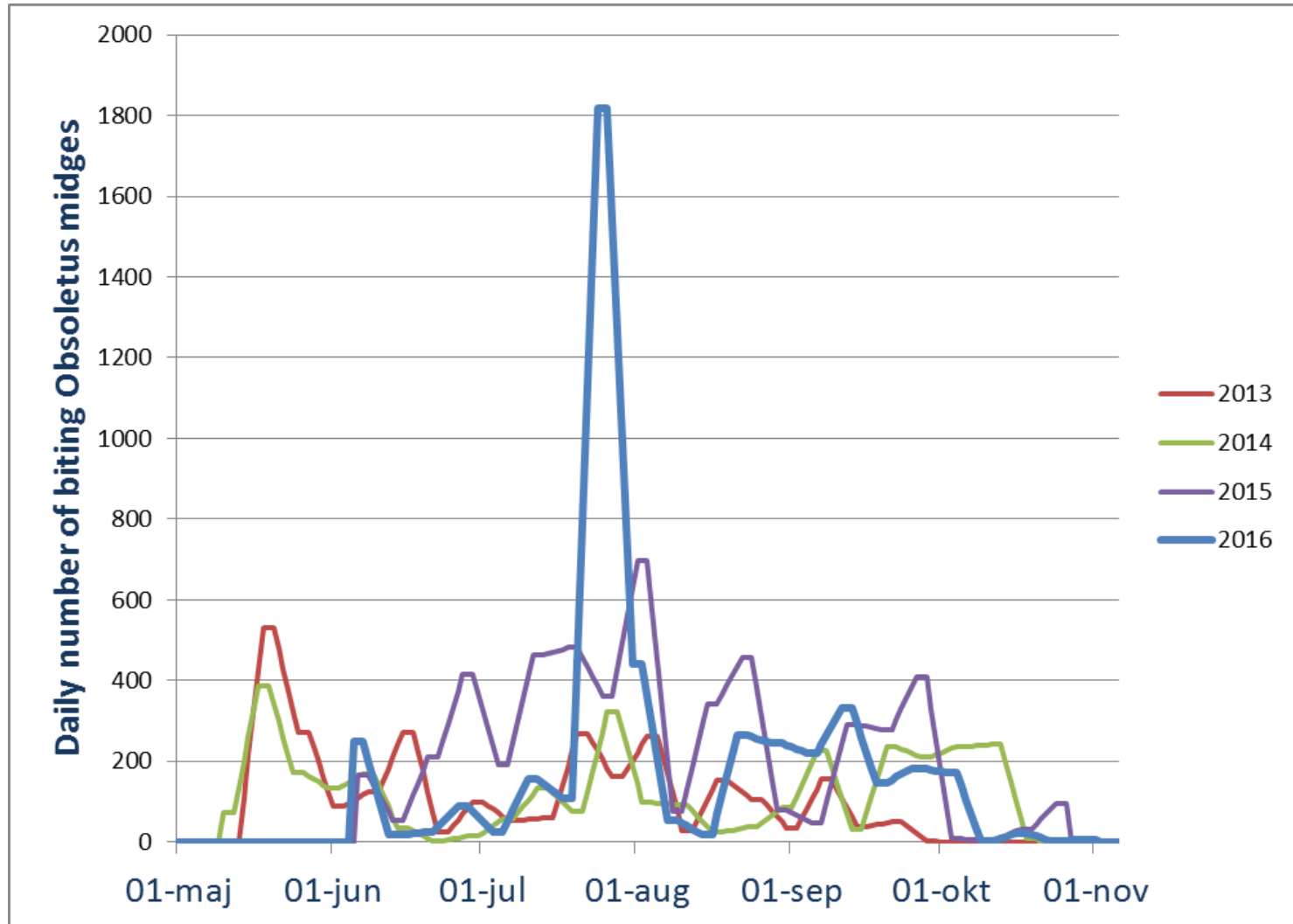


Weekly vector data are freely available on the internet

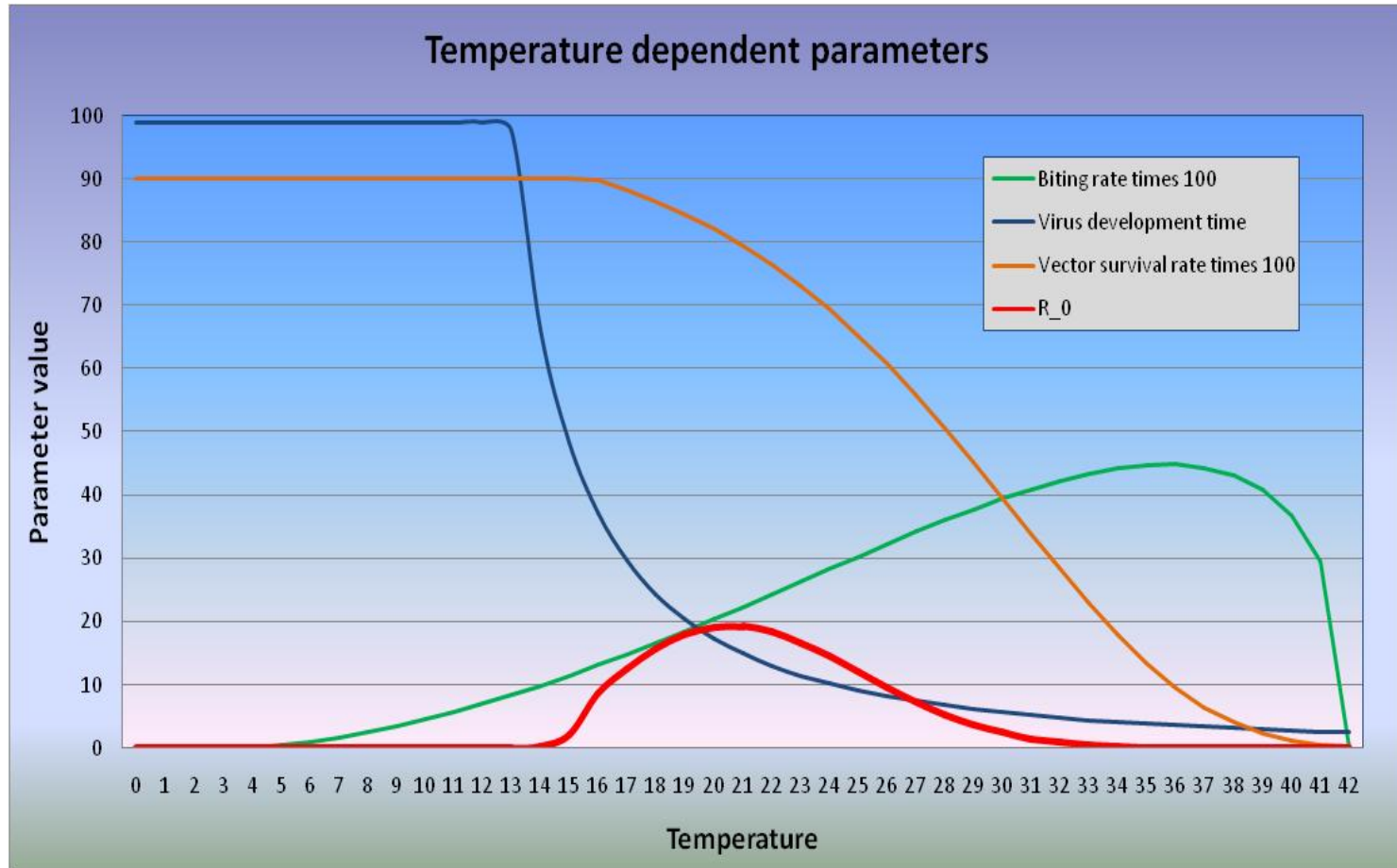


Weekly surveillance:  
 Mosquitoes at 5 sites  
 Biting midges at 3 sites  
 Supplemented by additional surveys

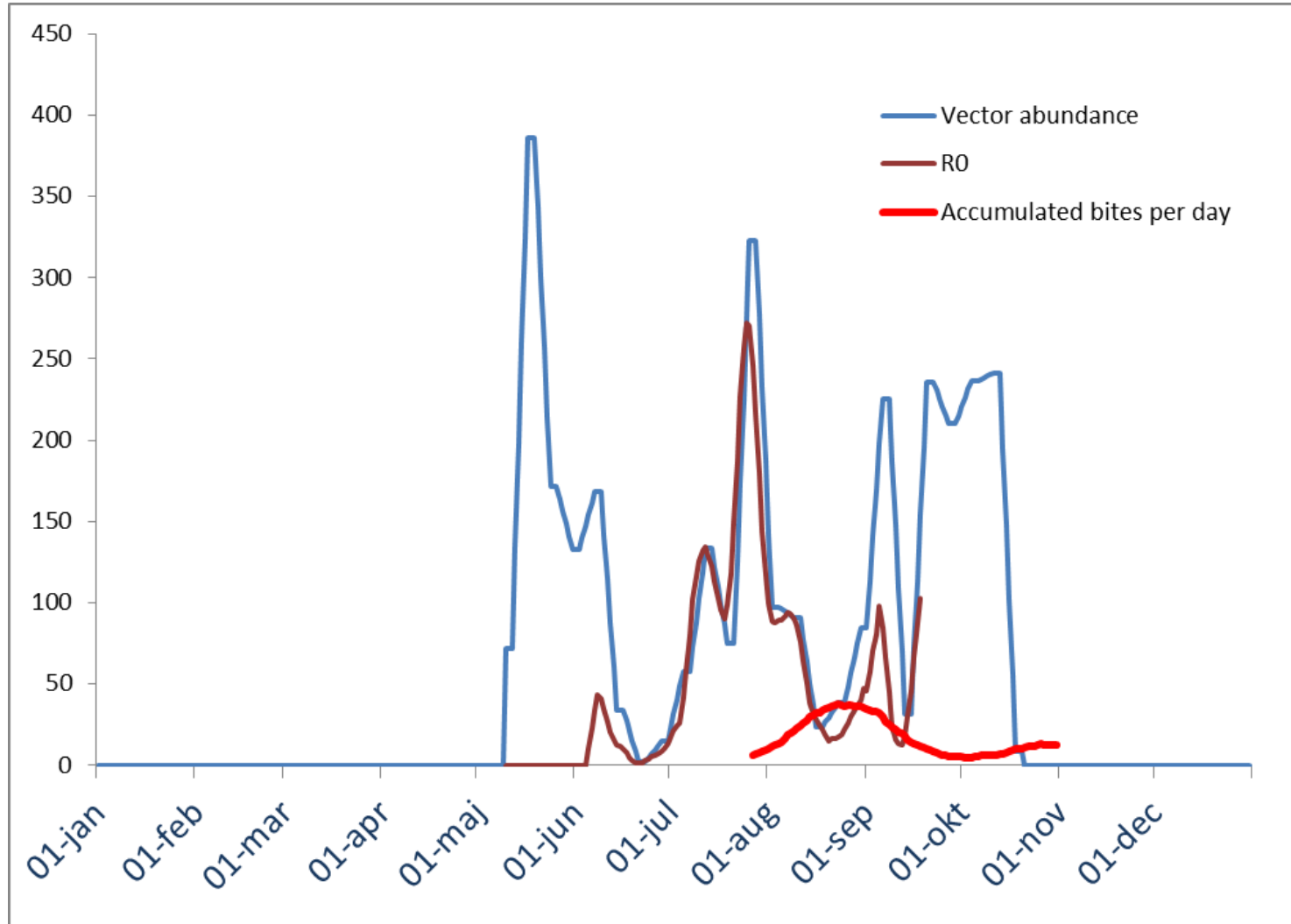
# Daily vector abundance



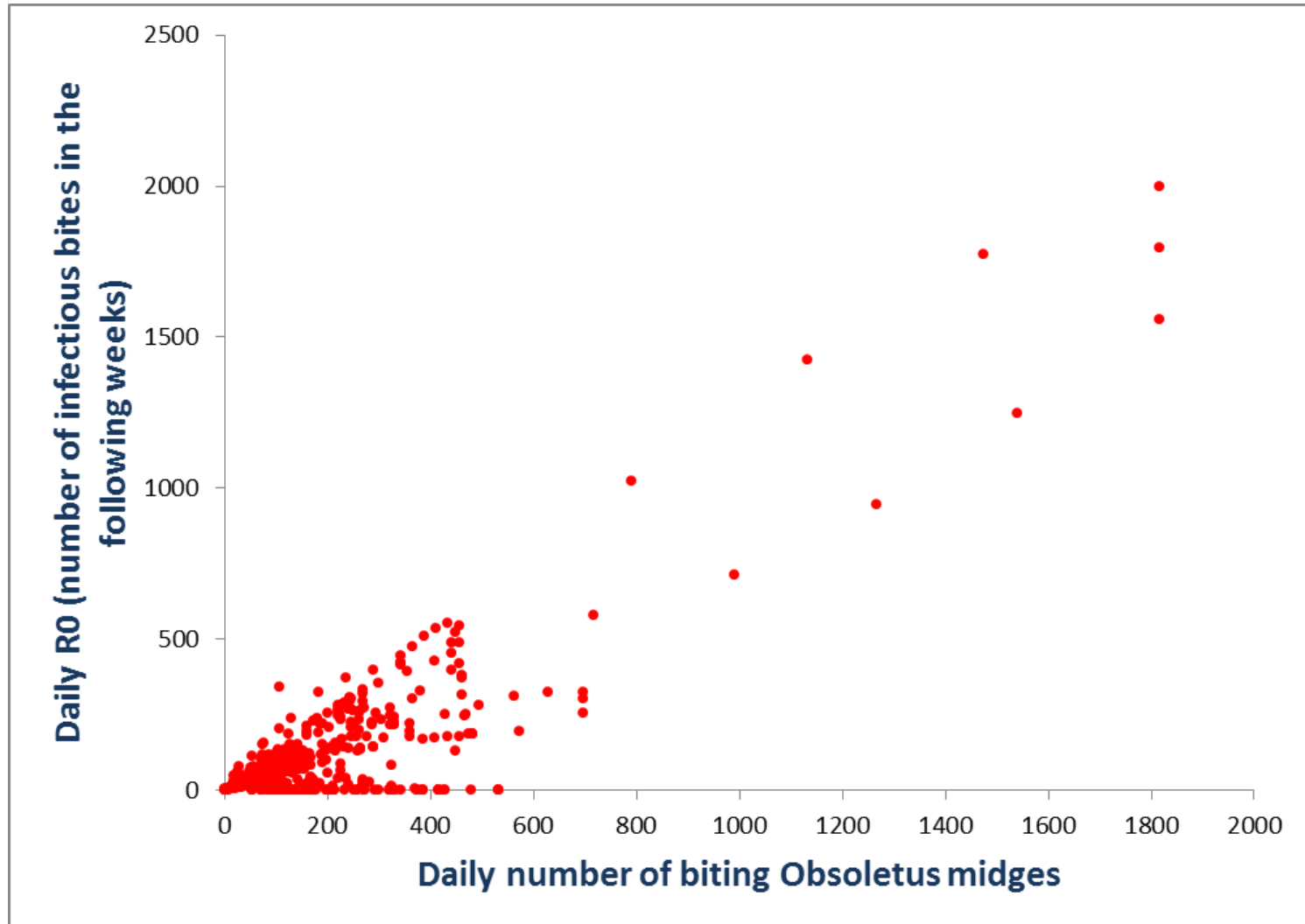
# Basic transmission parameters



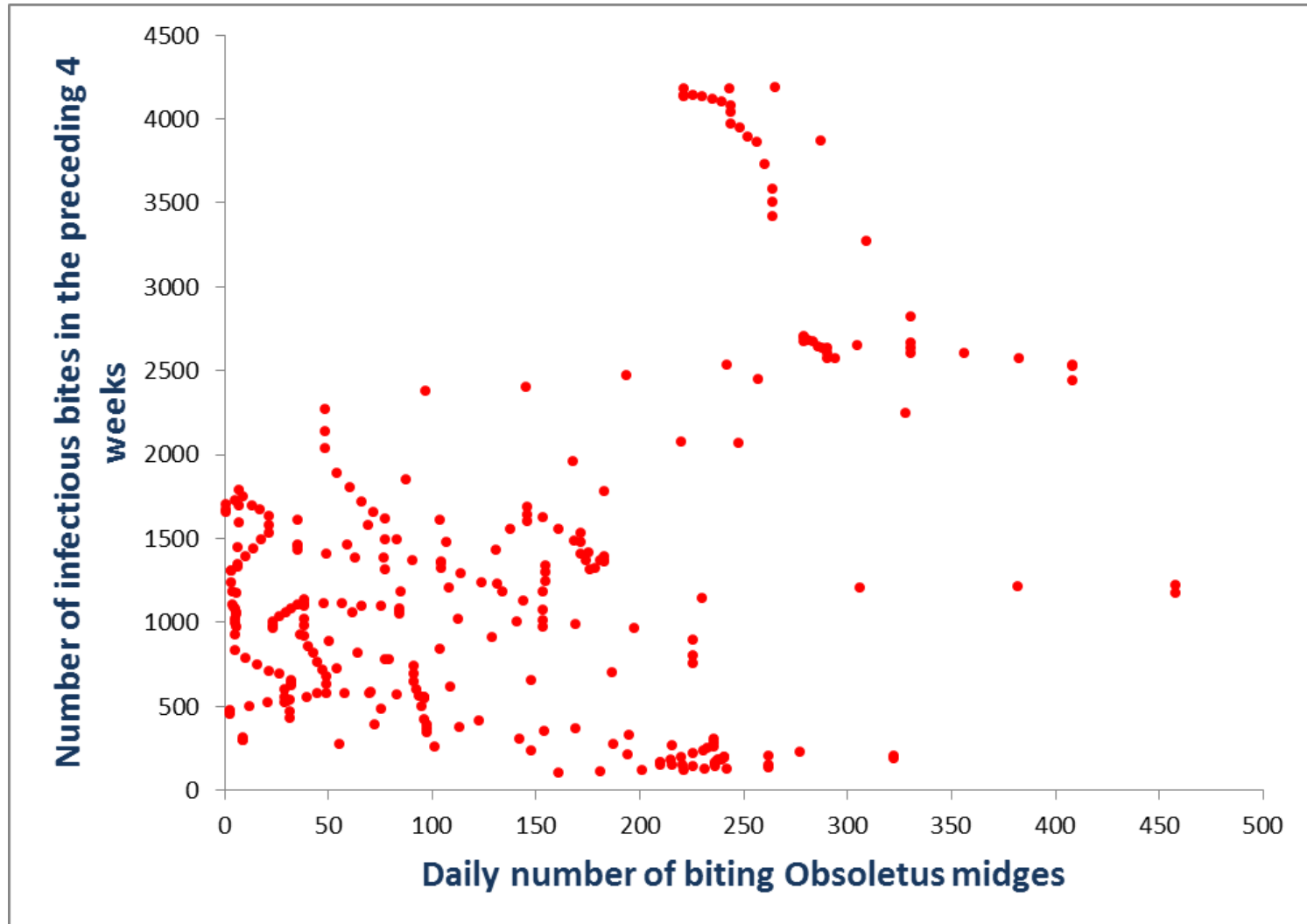
# It's all about timing



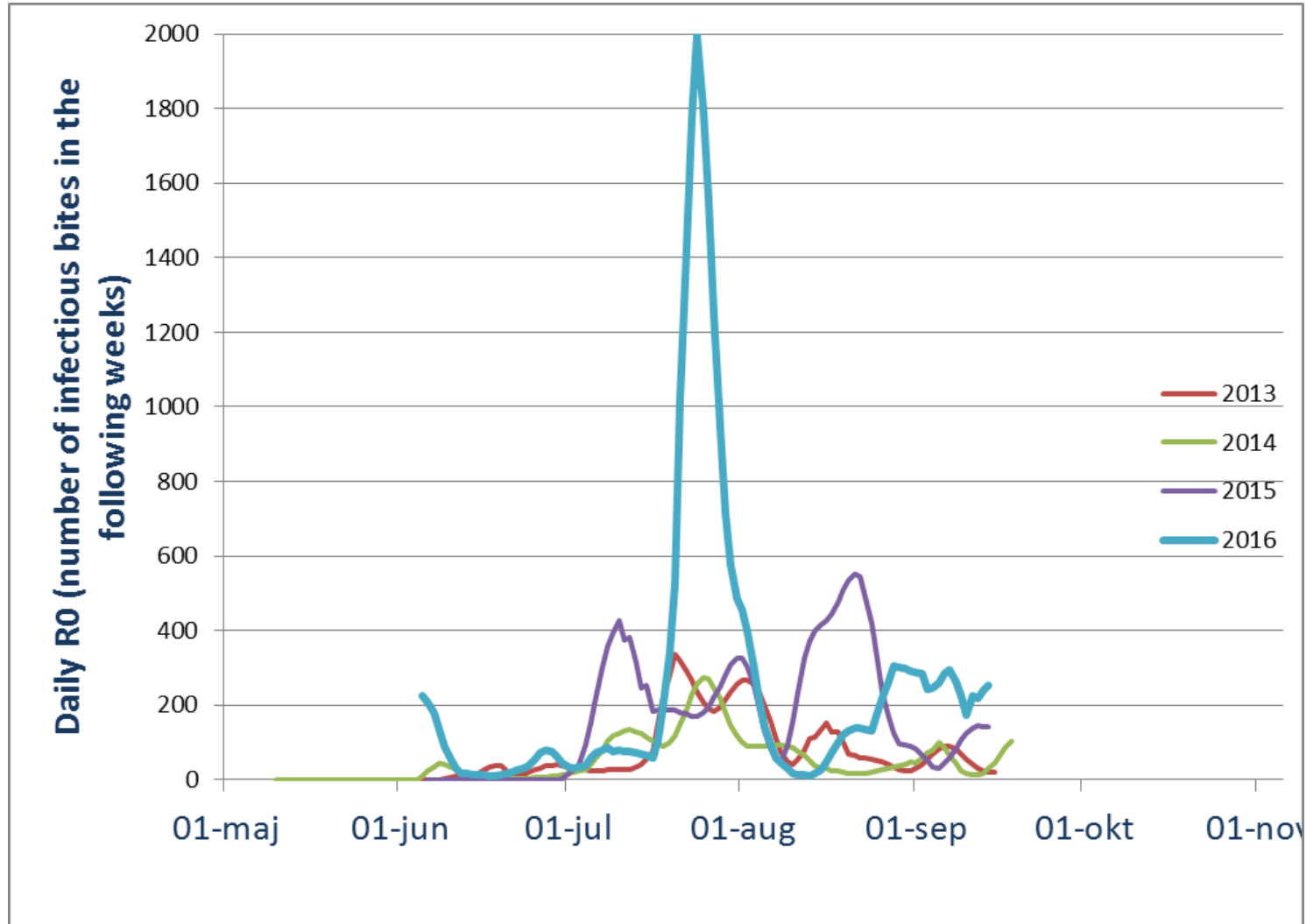
# Relationship between vector abundance and $R_0$



# Relationship between vector abundance and disease

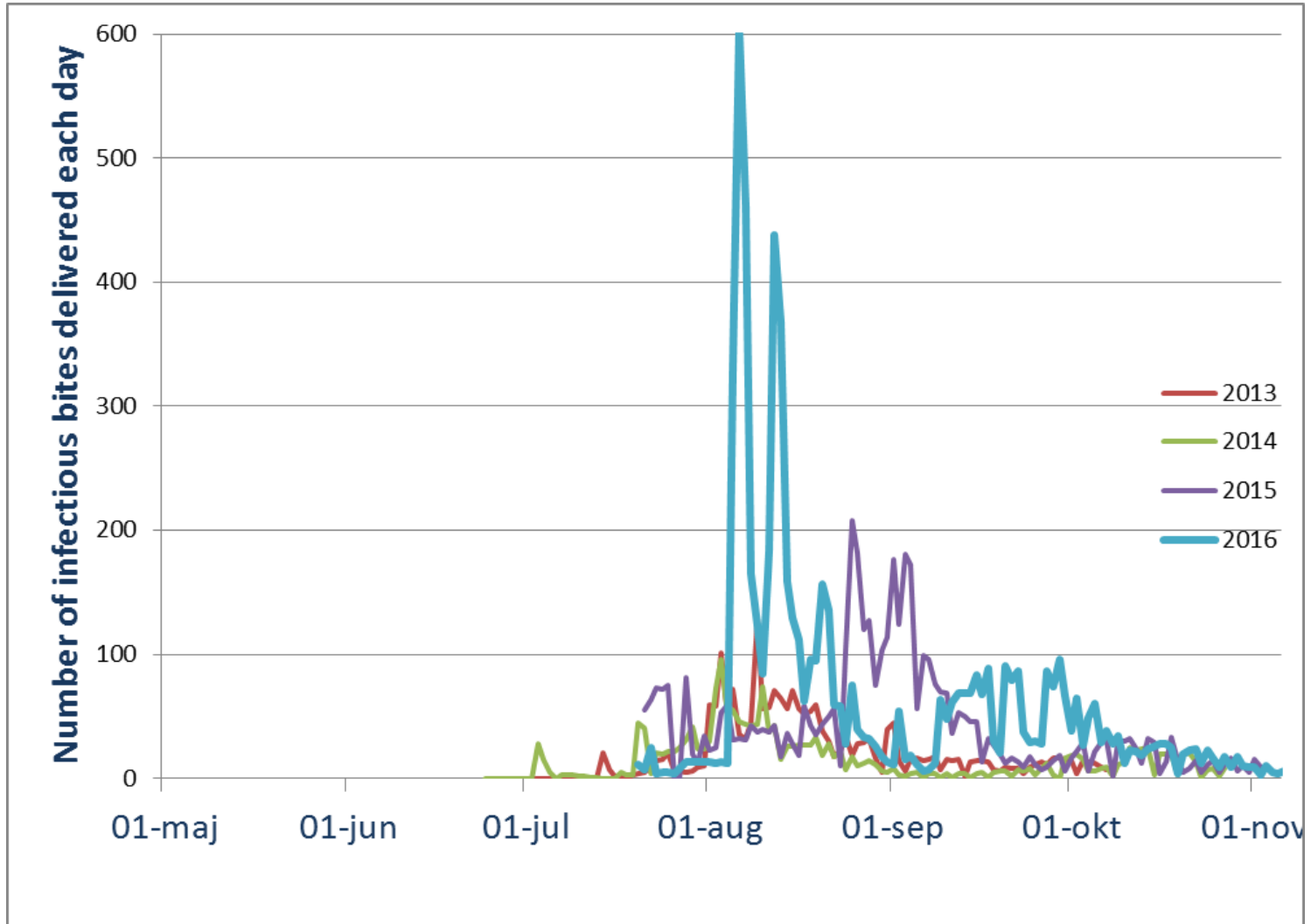


# Daily $R_0$ (future transmission)

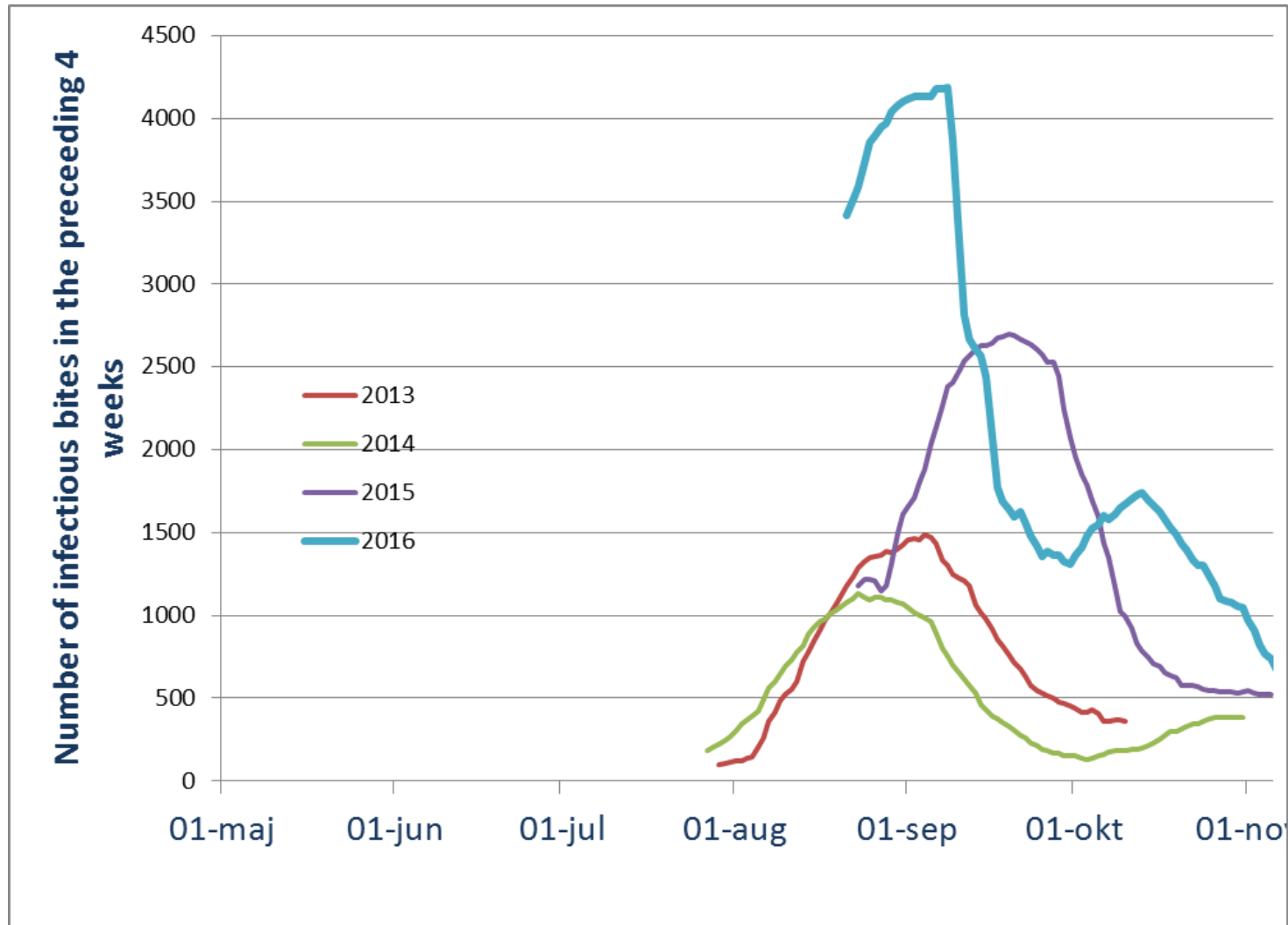




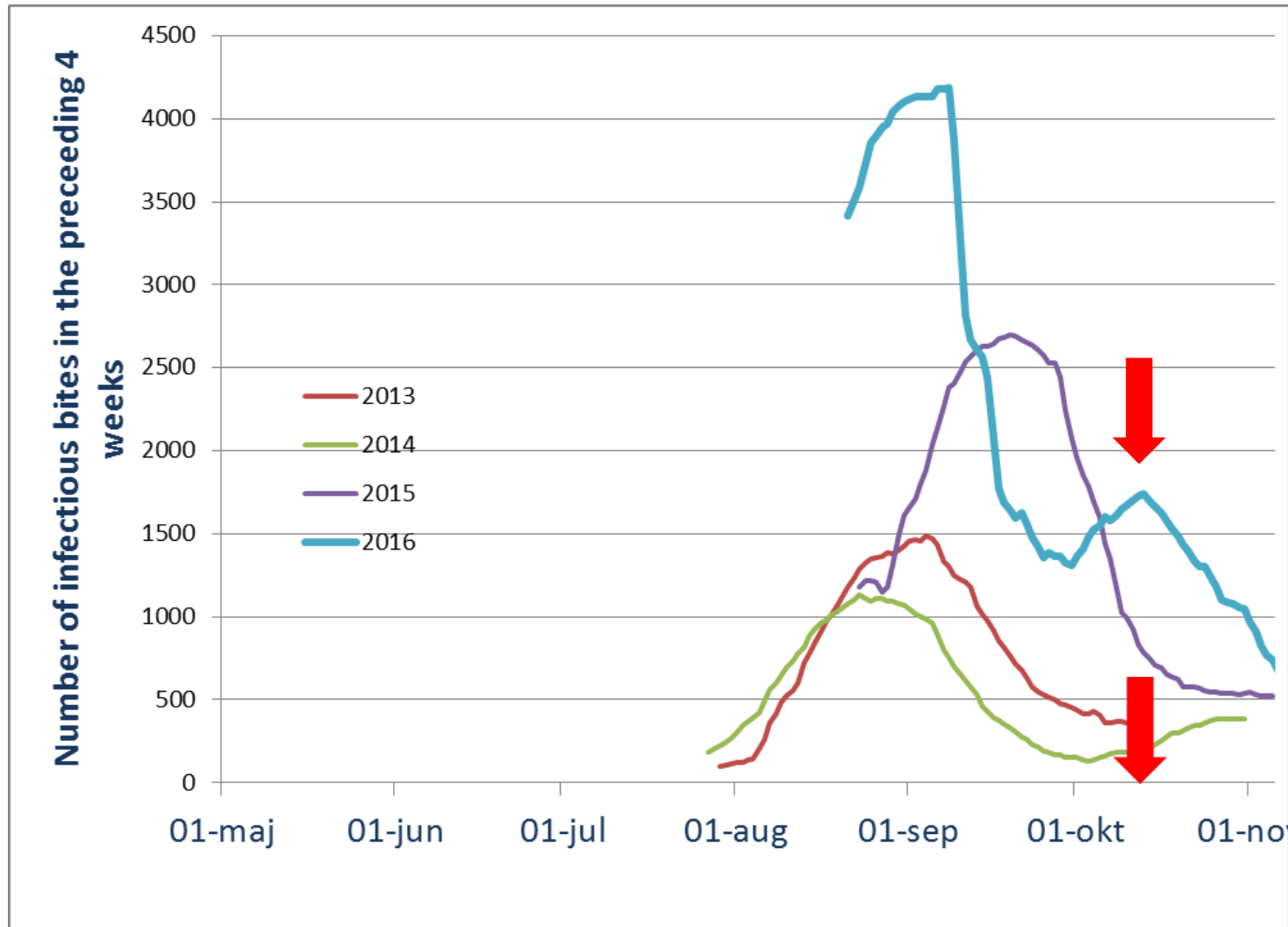
# Daily number of infectious bites



# Daily probability for disease (earlier transmission)



# Daily probability for disease high in October (2016)



**Thank you  
for your attention**

*René Bødker*

*You are most welcome to  
contact René Bødker*

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