

# Selection 2014 Index

$$\begin{aligned} \text{Best} = & (\text{AdultBees} - 15,000) / 5,000 \\ & + (\text{Index} - 14) \\ & + (1 - \text{MillionsSporesPerBee}) \\ & + (2 - \text{MitesPer100Bees}) \end{aligned}$$

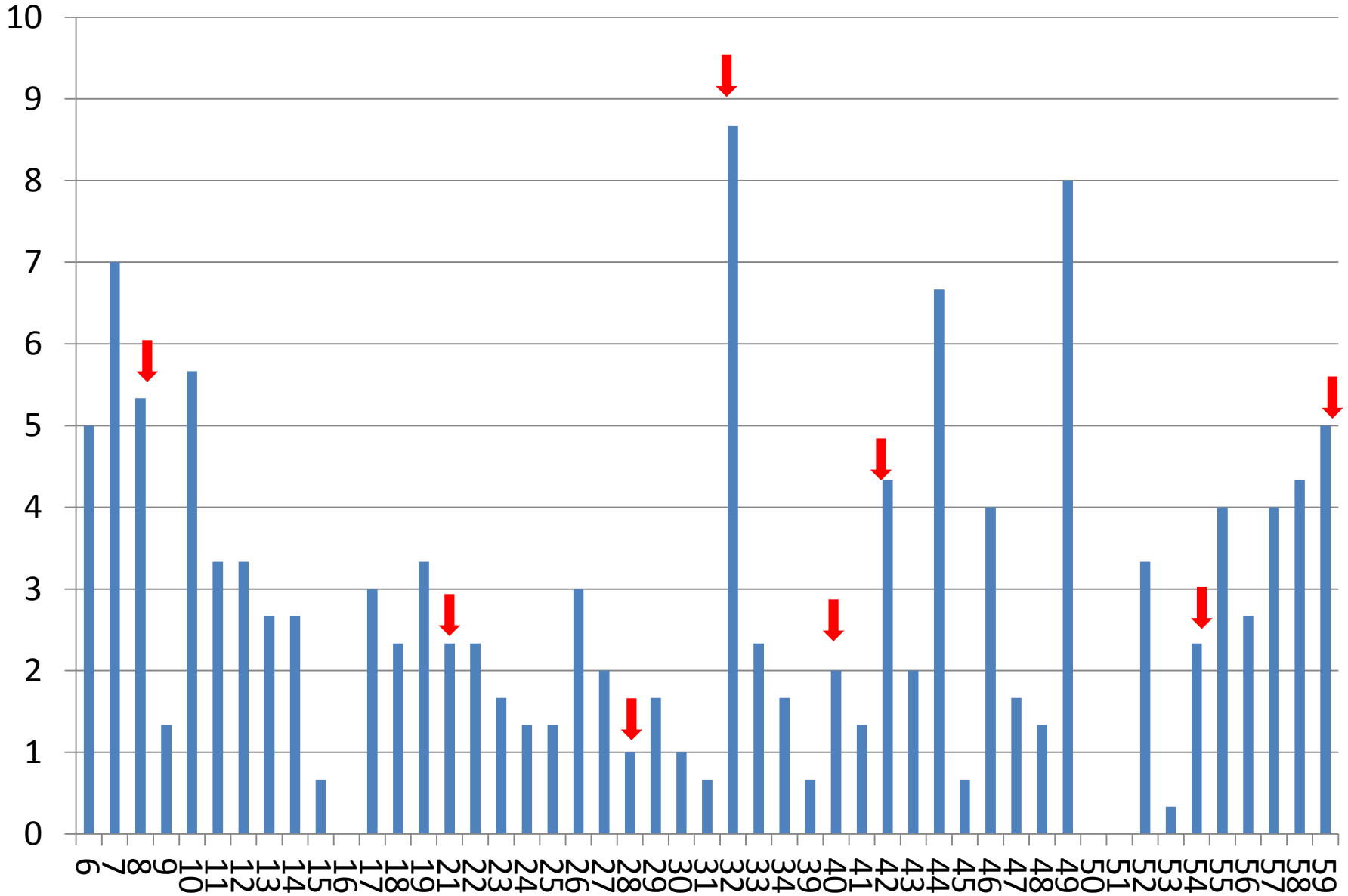
The formula was designed to create a baseline near 0 of a normal, acceptable colony. Colonies with higher than acceptable levels of infection get their overall score reduced. Strong colonies, get extra points. The 'Index' in the formula is a composite of observations (examples: brood pattern, defensive behavior) given ratings with 15 being a perfect score.

For more details about the index formula, see the accompanying spreadsheet and text documents.

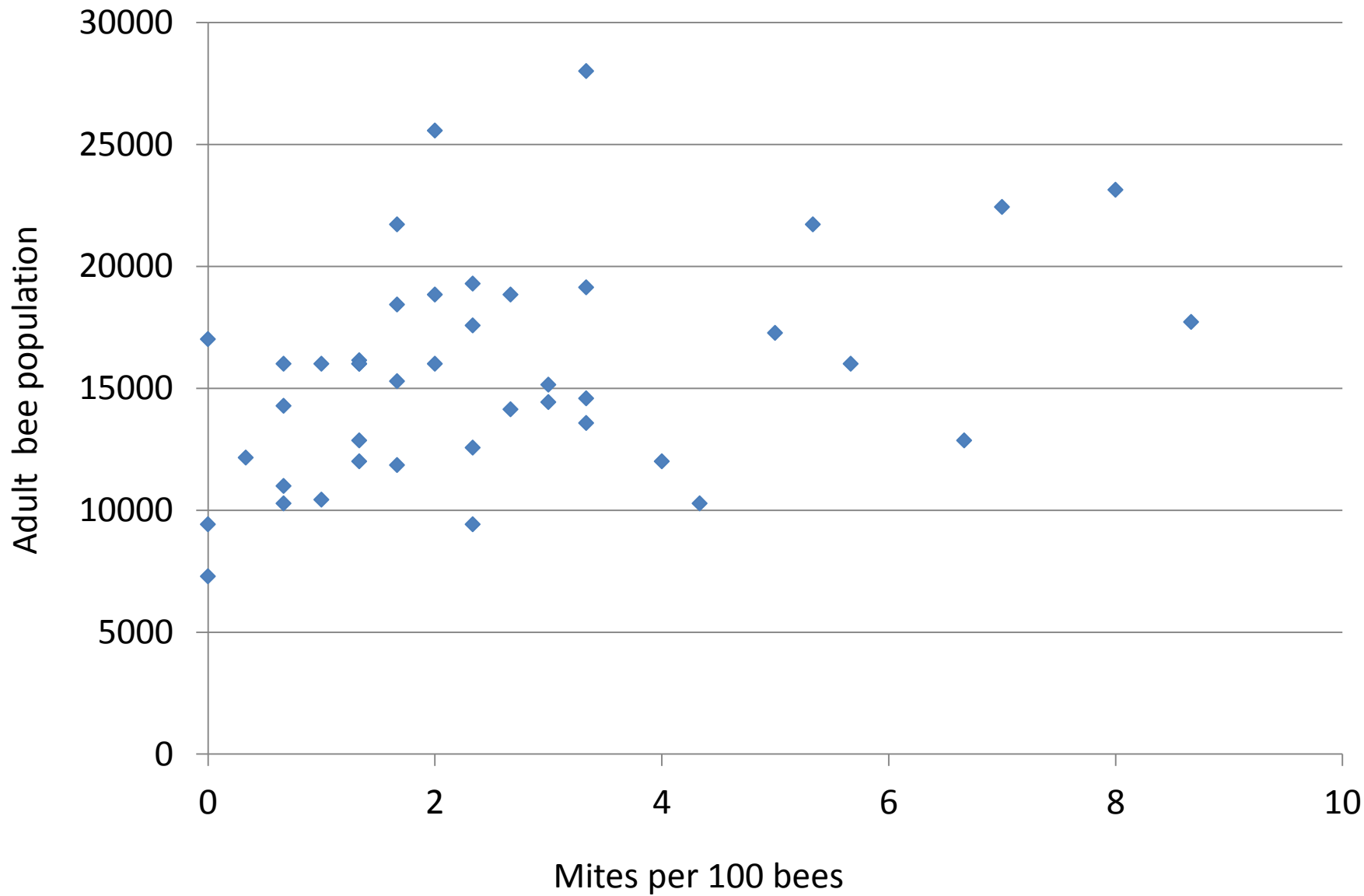
The following graphs give visualization of varroa, nosema, and colony strength measures. Visual comparisons are also given to compare pest levels to colony loss over winter and pest levels compared to colony strength.

# Mites per 100 bees, October 2013.

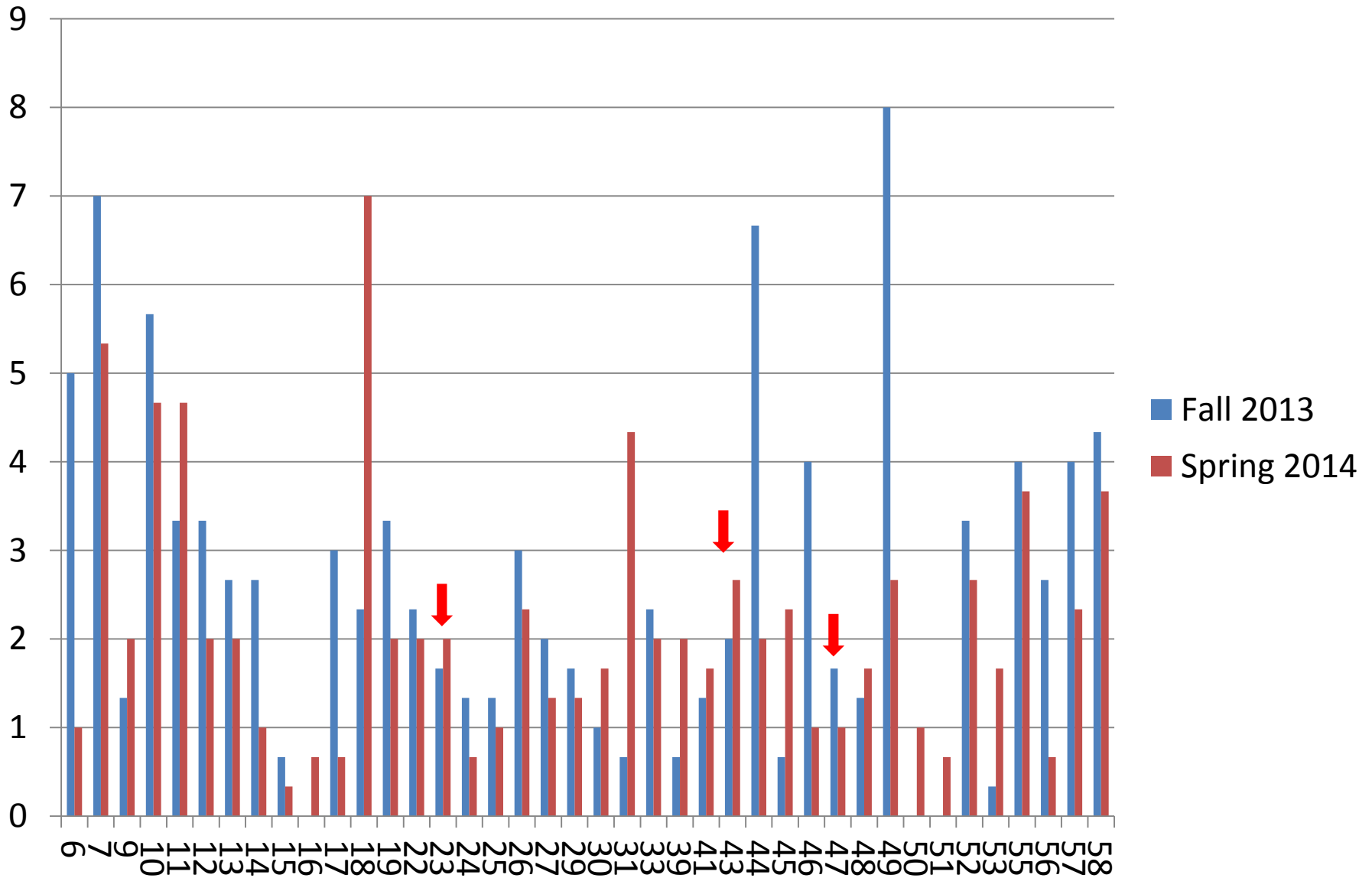
## Colonies in red died before March 2014



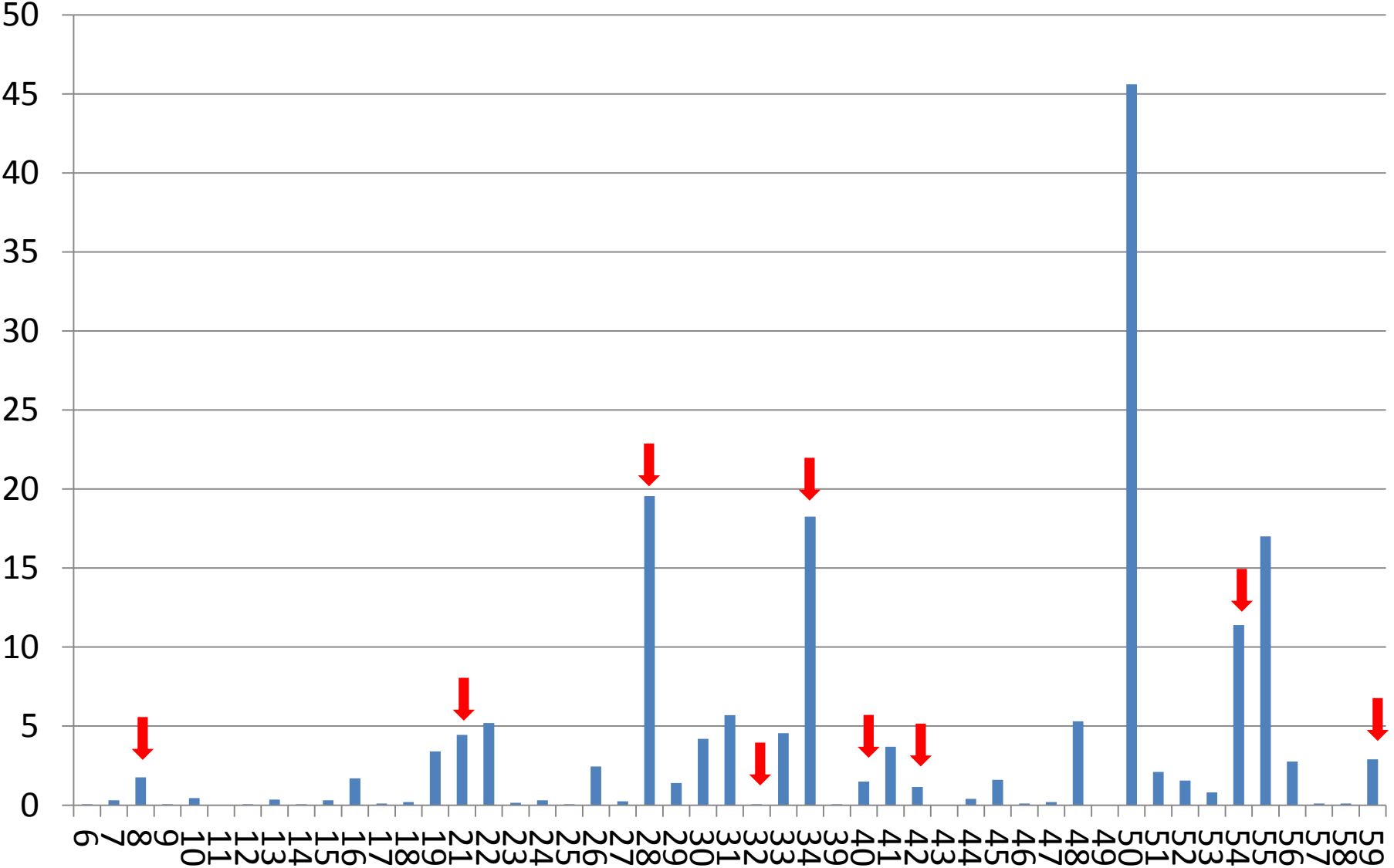
# Adult bee population compared to varroa, Oct, 2013



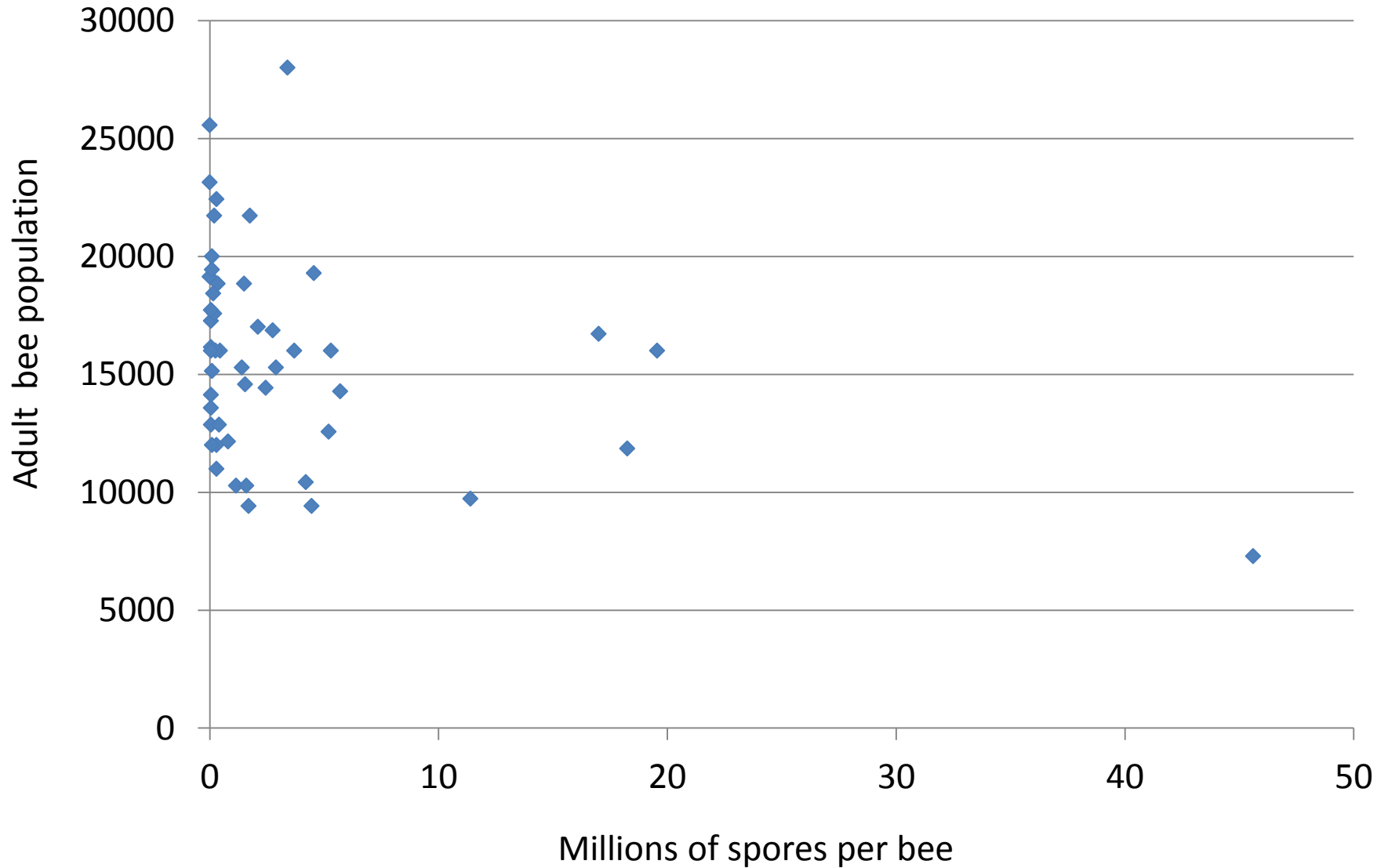
Mites per 100 bees for colonies that survived winter.  
 Red arrows indicate colonies selected by index of all measures



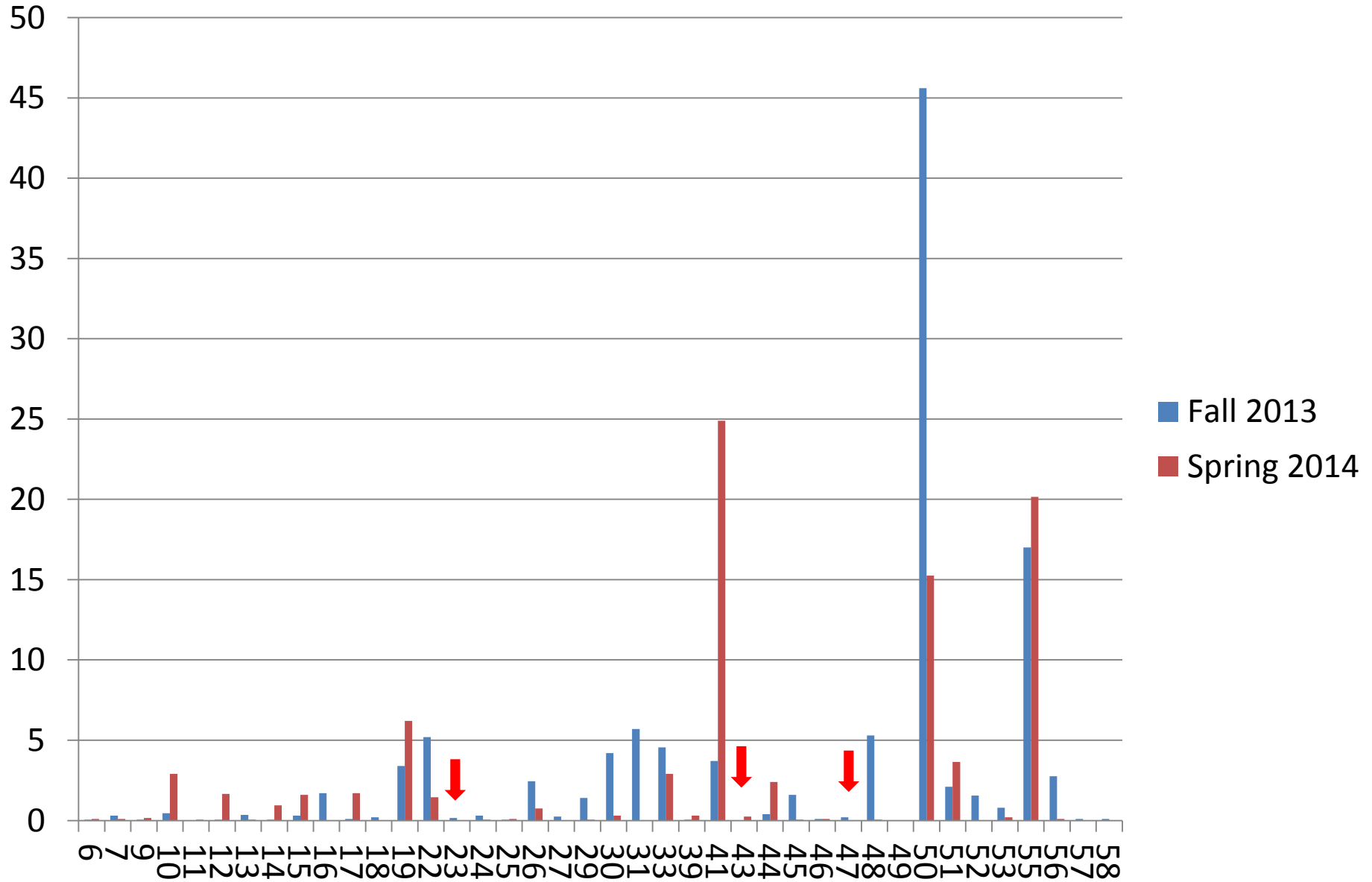
**Nosema, millions of spores per bee, Fall 2013.**  
**Colonies with red arrows died before March 2014**



# Nosema spores compared to adult bee population Oct, 2013

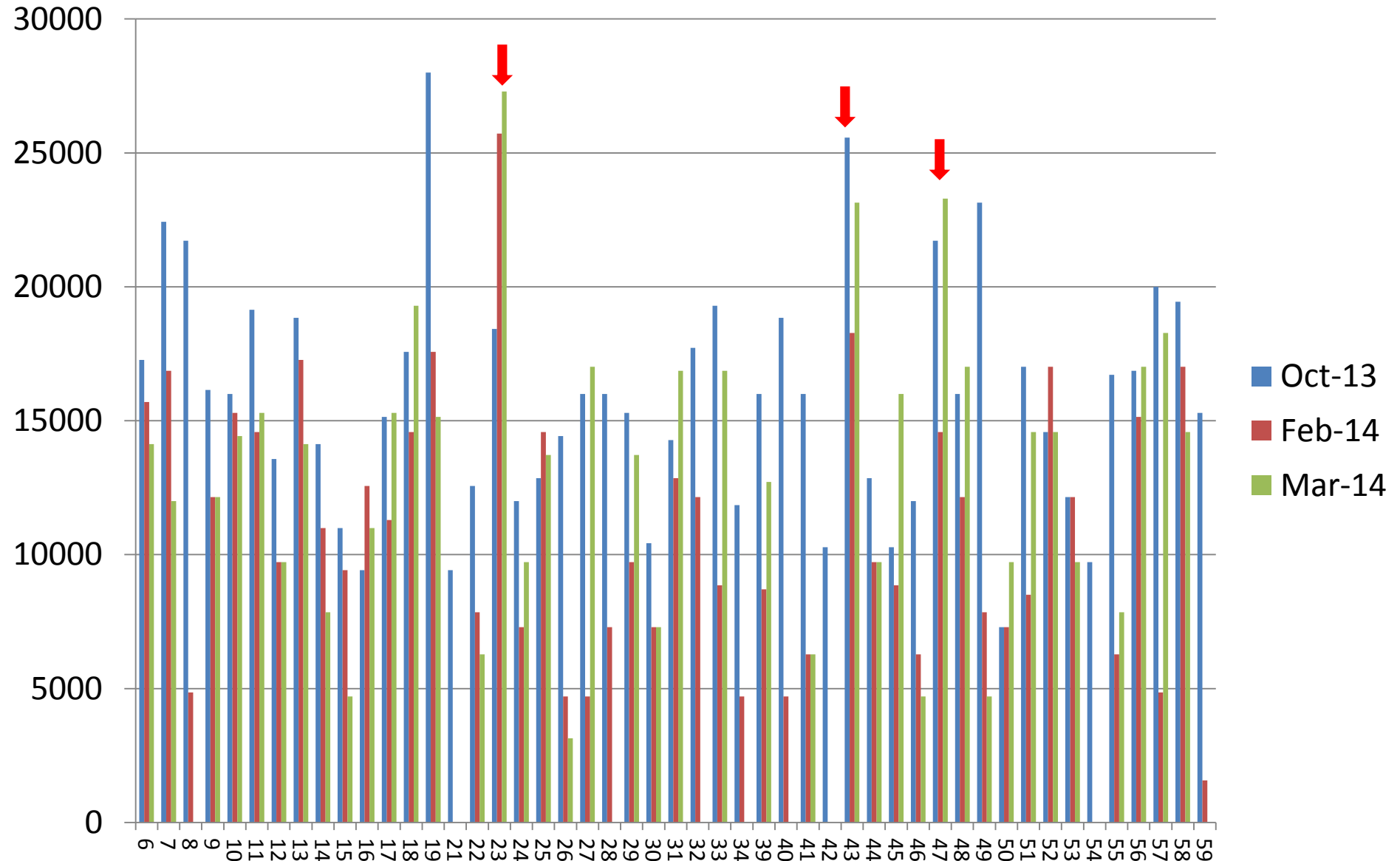


Millions of spores per bee for colonies that survived winter.  
 Red arrows indicate colonies selected by index of all measures



# Adult bee population.

Red arrows indicate colonies selected by index of all measures





These slides are part of a SARE bee breeding project conducted by Michael Wilson. For more information see [Rosecomb Apiaries.com](http://RosecombApiaries.com)