



**S2 Figure. Summary of capture histories, capture timelines, and mite prevalence among Santa Catalina Island untreated foxes.**

Foxes are divided into subsets ( $n = 7$  horizontal timelines) based on their total number of captures (2 captures = blue dots, 3 captures = green dots, or 4 captures = red dots) and capture intervals (2 months, 4 months, or 6 months). The total number of foxes ( $n$ ) at each capture period, mite prevalence at that time point, and recapture success is displayed at the bottom of the figure beneath each month.

\*Note: 1 of the 58 untreated foxes in the 6<sup>th</sup> subset was accidentally treated at  $t_2$ ; therefore, it was excluded from the mite prevalence calculation at  $t_3$  for the 6<sup>th</sup> subset. Note: 5 of the 58 untreated foxes were never recaptured after  $t_0$ .