Supporting Information for Vuong, Chiu, Smouse, Fonseca, Brisson, Morin, and Ostfeld (2016). *PLOS ONE*.

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S3 Table. Example of a Site-Specific Partition of the Full Dataset for the Bayesian Analyses

Data from all 14 tested ticks sampled from site 602 ($i=2$) in 2006 are presented below. Rows are sorted according to the observed presence/absence of infection (z_{ij}), observed success/failure of RLB test (v_{ij}) if $z_{ij} = 1$ (otherwise "NA" for "not applicable"), and observed presence/absence of HIS strains (t_{ij}) if $z_{ij} = v_{ij} = 1$ (otherwise missing data). Boldfaced entries are determined automatically by the value(s) in the preceding column(s).

i (Site Label)	Tick Label j (sorted)	z_{ij}	v_{ij}	t_{ij}
2 (602)	1	0	**NA**	**0**
	2	0	**NA**	**0**
	3	0	**NA**	**0**
	4	0	**NA**	**0**
	5	0	**NA**	**0**
	6	0	**NA**	**0**
	7	0	**NA**	**0**
	8	0	**NA**	**0**
	9	1	0	**missing**
	10	1	0	**missing**
	11	1	0	**missing**
	12	1	0	**missing**
	13	1	1	0
	14	1	1	1