The effects of *Borrelia* infection on its wintering rodent host

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Electronic Supplemental Material (ESM)

Online Resources 1

Figure S1. Antibody levels (mean absorbance) in relation to the original treatment (CT = Control individuals, BT= *Borrelia* injected individuals) in 40 bank voles captured and sampled in mid-December.
Table S1. The number of *Borrelia* injected (BT) and control (CT) individuals per enclosure (Enc) at the beginning of the experiment (Oct) and how many of them have been recaptured in mid-December (Dec). Also, the food treatment of each enclosure is provided. Only the original enclosure is provided although five individuals were found to have changed the enclosure in December, and three of them changed from ‘No food’ to ‘Food’ treatment. These three individuals have been excluded from GLMM and LMM analyses (see Material and Methods; Statistical analyses).

| Enc | BT Oct | BT Dec | CT Oct | CT Dec | Food treatment |
|-----|--------|--------|--------|--------|----------------|
| 1   | 2♀, 2♂ | 1♀, 1♂ | 2♀, 2♂ | 1♂     | Food           |
| 2   | 2♀, 2♂ | 1♀     | 2♀, 2♂ |        | No Food        |
| 3   | 2♀, 2♂ | 1♀, 2♂ | 2♀, 2♂ | 1♀     | No Food        |
| 4   | 2♀, 2♂ | 1♀     | 2♀, 2♂ |        | No Food        |
| 5   | 2♀, 2♂ | 2♀, 1♂ | 2♀, 2♂ | 2♀, 1♂ | Food           |
| 6   | 2♀, 2♂ | 2♀, 2♂ | 2♀, 2♂ | 2♀, 2♂ | No Food        |
| 7   | 2♀, 2♂ | 1♀, 1♂ | 2♀, 2♂ | 1♂     | No Food        |
| 8   | 2♀, 3♂ | 2♂     | 2♀, 1♂ | 2♀, 1♂ | Food           |
| 9   | 2♀, 2♂ | 1♀, 2♂ | 2♀, 2♂ | 1♂     | No Food        |
| 10  | 2♀, 2♂ | 1♀, 2♂ | 2♀, 2♂ | 2♂     | Food           |
| 11  | 2♀, 2♂ | 2♀, 1♂ | 2♀, 1♂ | 1♀, 1♂ | No Food        |
Table S2. Model selection table for global models for a) bank vole survival October-December; b) Body mass in December; c) Body condition index in December; d) Antibody absorbance level in December. The global model shows all the variables that were included in the model selection procedure. Variables *Borrelia* treatment (Treatment), Food treatment (Food1), Sex and Initial body mass were included in all final models. * is a symbol for interaction that include all possible 2-way interactions and main effects or the variables. AB means antibody absorbance as explanatory variable. The simplest model within 2 AICc value of the lowest is the best model and marked with **bold**. All models within 2 AICc of the lowest AICc are provided. All models included a random effect *Enclosure in October.*

|                     | df | AICc | ΔAICc |
|---------------------|----|------|-------|
| a) Survival till December |    |      |       |
| Global model        |    |      |       |
| # + Treatment + Food1 + Sex + Orig_mass + Treatment * Food1 * Sex + Treatment * Orig_mass * Sex | 6  | 117.5 | -     |
| # + Treatment + Food1 + Sex + Orig_mass | 7  | 118.4 | 0.87  |
| # + Treatment + Food1 + Sex + Orig_mass + Food1* Treatment | 7  | 118.6 | 1.09  |
| # + Treatment + Food1 + Sex + Orig_mass + Food1* Sex | 7  | 119.3 | 1.81  |
| b) Body mass in December |    |      |       |
| Global model        |    |      |       |
| # + Treatment + Food_1 + Sex + Orig_mass + Treatment * Food_1 * Sex + Treatment * Orig_mass * Sex | 7  | 188.3 | -     |
| # + Treatment + Food_1 + Sex + Orig_mass | 8  | 188.5 | 0.19  |
| c) Body condition index in December |    |      |       |
| Global model        |    |      |       |
| # + Treatment + Food_1 + Sex + Orig_mass + Treatment * Food_1 * Sex + Treatment * Orig_mass * Sex | 7  | 122.9 | -     |
| # + Treatment + Food_1 + Sex + Orig_mass + Food_1* Sex | 8  | 123.6 | 0.77  |
| d) Antibody absorbance levels in December |    |      |       |
| Global model        |    |      |       |
| # + Treatment + Food_1 + Sex + Orig_mass + Treatment * Food_1 * Sex | 7  | -84.9 | -     |