Supplementary Material 2 – Berlese funnel apparatus

Berlese funnels (Fig. S2) were set up to collect live ectoparasites from the nests. Three apparatuses (labelled A, B, and C) were set up and ran simultaneously, immediately after the nests were collected from the study sites; three nests were collected each visit. Nests were placed into a small bowl with the bottom cut-off (Fig. S2-C), overtop a sheet of 25mm x 25mm wire mesh. All apparatuses used a 40-watt lightbulb as a heat source that was placed directly overhead the nest in the bowl (Fig. S2-A). An extended wall (Fig. S2-B) was wrapped around the bowl containing the nest to prevent mobile ectoparasites (such as fleas) from escaping the apparatus, as well as preventing nest contents from spilling out. Nest contents falling through the mesh were collected in a beaker filled with 70% ethanol (Fig. S2-E). Each nest remained in the funnels for 72 hours, after which (the nests) were placed in labelled paper bags and stored in the refrigerator. The debris collected by the apparatus was transferred to labelled jars and also stored in a refrigerator, where they would later be processed.

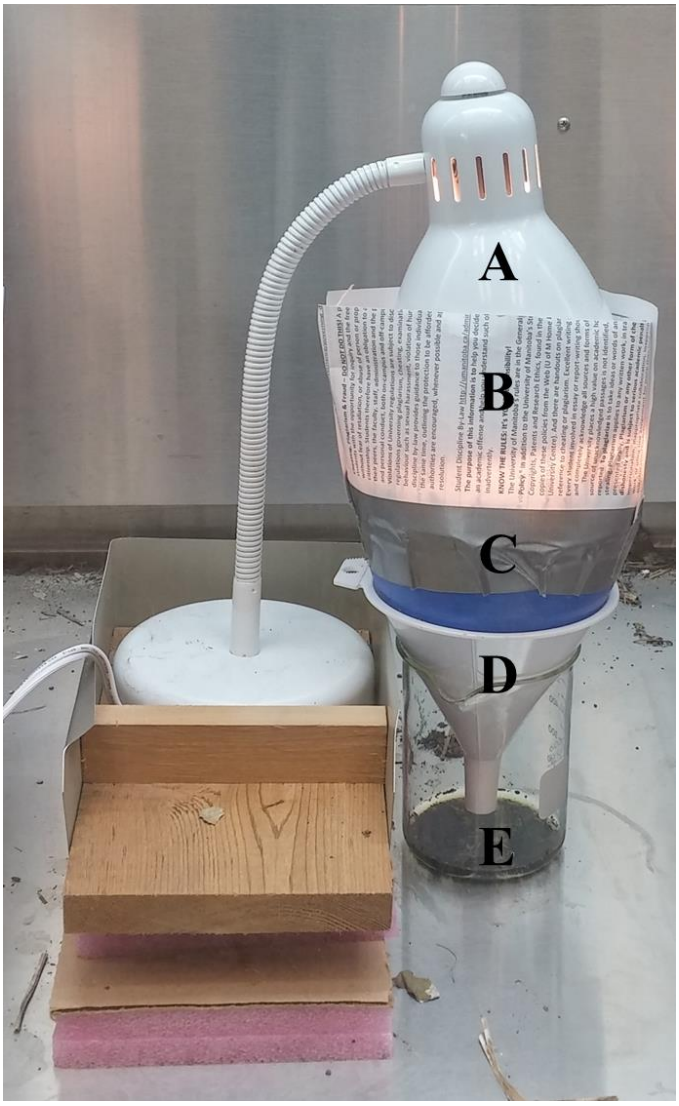

Figure S2. Active Berlese funnel collecting nest ectoparasites and other debris from the nest. A desk lamp with a 40-watt lightbulb (A) was used to create a temperature gradient over the nest, triggering thermotaxis in ectoparasites. A wall (B) is wrapped around the bowl containing the nest (C) to prevent ectoparasites from escaping and nest contents from spilling out of the bowl. Ectoparasites (and other living, non-parasitic organisms) fall through an opening at the bottom of the bowl, through a funnel (D), and into a beaker containing 70% ethanol (E) which acts as a preservative.