

Not just an ants' nest!

Murdo Macdonald

Highland Biological Recording Group, 'Tigh nam Beithe', Strathpeffer, Inverness-shire, IV14 9ET



The James
Hutton
Institute

Introduction

It may look like just a mound of plant debris with ants thronging over and around it, but this is home to a complex community of interdependent invertebrates.

Photo: Mick Garratt



Shining Guest Ant

The Shining Guest Ant *Formicoxenus nitidulus* exists only in the mounds of wood ants, as a commensal or social parasite. It prevents attack by the larger hosts with deterrent chemicals on the cuticle¹. It is a UK BAP priority species, but is certainly under recorded because of its small size.



Photo: Stewart Taylor

Leaf Beetles

Beetles in the genus *Clytra* develop as larvae in the nests of wood ants. The female drops her eggs onto the mound from an overhanging twig, and the larvae may be seen walking over mounds protected inside a hard case.

Photo: Tristan Bantock



Rose Chafers

The Rose Chafer *Cetonia cuprea* also develops in wood ant nests, the larvae feeding on plant debris. Most of the beetles associated with wood ants, are however, tiny rove beetles (Staphylinidae) only a few millimetres long.



Photo: Tim Ransom

References

¹Martin S J, Jenner E A & Drijfhout F P (2007) Chemical deterrent enables a socially parasitic ant to invade multiple hosts. *Proc. R. Soc. B.* **274**: 2717-2722. DOI: 10.1098/rspb.2007.0795.



Photo: Tristan Bantock

Woodlice

One woodlouse, *Platyarthrus hoffmannseggii*, is found only in ant nests. It has lost its eyes, and is pure white.

The classic work on the many invertebrates in ant nests is *The guests of British ants* by Horace Donisthorpe, published in 1927.