

Nature note: a gleam in the dark

I've spent some happy evenings this summer trying to find a glow-worm, a magical and mysterious species we have all heard of but few have actually seen. I've visited several promising woodland sites and wandered slowly among the bushes in the darkness, looking for a tell-tale gleam in the undergrowth. One of the pleasures of natural history is that you often find one interesting thing while looking for another. So, I've seen plenty of owls, bats,

deer, foxes, badgers and other creatures of the night: heard lots of loud rustlings by unseen animals, and surprised at least one ardent courting couple, who could be said to be glowing somewhat, I suppose. But not a glimpse of my real quarry. Glow-worms are getting rare now, so I was beginning to lose heart.

But then I struck lucky. At about 10pm on one warm, calm evening in mid-July, I was exploring a local



Contributed

Female glow-worm

forestry trail, when I spied a tiny glimmering light deep in the bracken, almost at ground level. Yes! I crawled in and shone my torch on it, to reveal a small drab insect clinging to a stem and emitting a weird, golden-green radiance. It's the female glow-worm that lights up this way – to attract the males, wouldn't you have guessed. The females are wingless and look like rather nondescript grubs, but the males are winged and fly on to the landing-strips thus illuminated. Once the females have mated they switch off the lights.

Shakespeare described the glow-worm's light as a *pale ineffectual fire*, and as usual, he had correctly noticed an important natural feature. The glow-worm contains a chemical called luciferin, which through a complex reaction with oxygen and water converts almost all its energy into light rather than heat, so the light is indeed a pale, cool one (but quite bright). That's the opposite of the domestic light-bulb, which wastes most of its energy in heat.

So maybe there's a new idea here for the Green Party. How about a National Grid of street lights, powered by glow-worms? A famous scene in Thomas Hardy's *Return of the Native* almost anticipates this possibility. Diggory Venn and Wildeve play at dice by the light of some glow-worms they have gathered and placed in a circle around their makeshift gaming-table when their lantern blows out. And various poets hail its powers as an insect *lantern-bearer* (Blake) *earth-born star* (Wordsworth), *love torch* (Coleridge) and *twinkling star of spangled earth* (John Clare). Winston Churchill, more prosaically, didn't seem to realise that glow-worms were actually beetles not worms. *We are all worms*, he said, *but I am a glow-worm*.

Jeremy Mynott