

Nature by torchlight

Thursday, 22nd March and the Fair Isle Wildlife Club tried something a little different: a nocturnal excursion. The Athertons, Geoff and Donna, were joined by 5 hardy islanders on a cold but otherwise perfect evening – no wind, no cloud, a heaven full of stars. The main objective of this night hunt was to look for caterpillars. Geoff explained that at this time of year caterpillars, difficult to locate by day, are active, abundant and easy to find on top of clumps of grass and other vegetation after dark. He also explained that we were likely to find fewer than normal because of the cold and, even more so, because the recent bout of extreme winds had flattened the vegetation on which the caterpillars occurred. Nevertheless, it was not long before we were looking at our first caterpillars, out on the vegetation as plain as plain to see in the torch light. Small square-spot *Diarsia rubi* marginally outstripped square spot rustic *Xestia xanthographa* amongst the finds whilst one caterpillar with dark chevrons on its back was later identified by G & D as ingrailed clay *Diarsia mendica*.

Ingrailed clay and square spot rustic are two of the commonest moths we see in summer; adult small square-spots are relatively common in late July. We know far less about them in their immature stages, but Geoff and Donna are certainly doing their best to redress this. They have been very active during their stay, Geoff during Donna's working hours and both thereafter, seeking out caterpillars, and finding some adult moths too. Their efforts will add an extra dimension to what we know about this aspect of insect ecology on the isle.

The only other moth larvae encountered relied on Geoff's specialist knowledge. Gentle exploration of long-dried chicken droppings in the north Shirva hen house (what delights Geoff gets up to in his spare time?) revealed a number of white wriggling maggot-like caterpillars of the large pale clothes moth *Tinea pallescentella*. When I caught an adult about 10 years ago it was considered a great rarity in the northern isles but subsequently we have established that it is not infrequent in and around out buildings. Fortunately, as the hen house location demonstrated, clothes do not come number one on this species' list of favourite meals.

During our searches for caterpillars, we met a few other invertebrates: three species of slug, and the bristletail *Petrobius maritimus*. The last has the very appropriate local name of "jumping jack" – they are certainly nimble and liable to leap about when disturbed. The jumping jack is a seashore species, but on Fair Isle salt-laden winds ensure that "seashore" conditions extend across the isle. It is an abundant denizen of walls and buildings wherever one looks.

I took advantage of the excursion to try out my ultra violet torch. The UV torch is a recent addition to the lichenologist's tool bag. Certain lichens show fluorescence under UV light which can help with identification. In daylight and normal torch conditions the crust-like, stone-hugging lichens outside the shop are hard to differentiate. Application of the UV beam drew audible gasps of astonishment. A dull patchwork of greys, browns and dirty white magically transformed to a fairyland mosaic of bright orange, lime green and purple. Clearly they were different species.... if only we knew what they were!

I am extremely grateful to Geoff and Donna for leading this event, and for all their interesting and knowledgeable commentaries. It was nice to be a "follower" for once. I learnt a lot.

Nick Riddiford, 28th March 2007