

## Moth trapping on the PEACH Project

As part of the PEACH Project at St Michael's Church Rob Dalziel, a local retired engineer in Brent Knoll, has constructed a moth trap. Much of the trap was built using recycled materials eg plastic buckets. The light source was built by combining a large number of small LED bulbs in a cone that sits on top of a recycled bucket. The crucial part of the design is that it is driven by a battery, which means that it can be used anywhere in the churchyard.



Moth Trap Buckets



Moth Trap Power Unit



Rob with moth trap

After initial trials in local gardens we ran our first trapping exercise in the churchyard in early June. We had a slightly disappointing count of 9 species but the weather was cold at the time. Two of our species that we found are illustrated below.



Moth trap night set



Treble lines

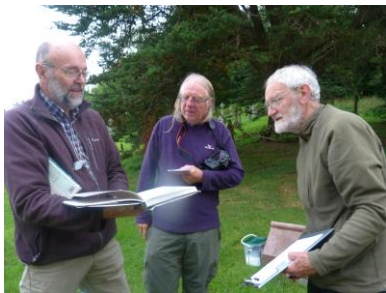


Heart and dart

As Rob's experience has increased, so has the weather, and the number of species he has recorded. On one occasion he recorded 51 species in his garden overnight, including a magnificent elephant hawk moth. We needed to get back to the churchyard to do a further survey, but before doing that Rob wanted to get over another problem, the time taken to identify the moths themselves. The difficulty with moth identification is

that there are around two thousand species in the British isles, and many of these are very similar with only minor variations between species. He was spending hours after each session poring over pictures comparing them with photos he had taken. He needed to have a shorter method of identifying the species. The PEACH project contribution has been to use our local nature conservation network to contact someone with expertise in moth identification. Steve Pilkington agreed to come to help us when we opened up the trap at 7am one morning in early August.

Steve arrived armed with an array of small plastic bottles and approached the trap cautiously looking for moths around the trap. He explained that not all the moths attracted by the light would end up in the trap. The first few species were coaxed into bottles and identified using a magnifier. Most species could be identified and released immediately. Ones that he could not identify he took home and made a more detailed identification. So, what was the total species count? **It turned out to be 31.**



Discussing our finds



Close up look at a specimen



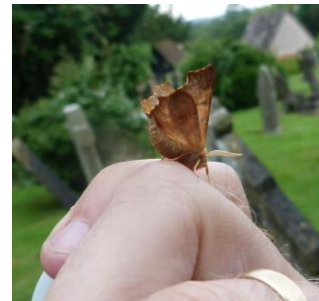
A Footman that missed the trap



A view of a Jersey Tiger



A trio of finds in the egg box Some moths won't leave the scene



Sadly there were no hawkmoths but the **Jersey Tigers** were very striking, with vivid black and white streaked upper wings. Their scarlet underwings are revealed when the fly. Most British moths have English names that describe key characteristics; **Blood-vein** (a small greenish moth with prominent red veins), **Gold Spot** (they have gold spots on their forewings) and **Silver Y** (a common migrant moth with a prominent y on its forewings). The process of identification is now becoming clearer...we hope!

## Species list of moths identified during 2021

<b>Moth Name</b>	<b>Moth Family</b>	<b>Moth Name</b>	<b>Moth Family</b>
Dingy Footman	Footman	Heart & Dart	Noctua
Pale Mottled Willow	Noctua	Jersey Tiger	Tiger
Agriphila Selasella	Micromoth	Large Yellow Underwing	Noctua
Agriphila Tristella	Micromoth	Lesser Broad-bordered Yellow Underwing	Noctua
Apple Leaf Skeletonizer	Choreutidae	Middle barred minor	Noctua
Blastobasis adustella		Mother of Pearl	Micromoth
Blood-vein	Geometer	Mottled Beauty	Geometer
Buff Footman	Footman	Nut Tree Tussock	Noctua
Common Footman	Footman	Orange swift	Swifts
Common plume	Micromoth	Rosy Footman	Footman
Common pug	Geometer	Shaded broad bar	Geometer
Common Quaker	Noctua	Shoulder Striped Wainscot	Noctua
Common Rustic	Noctua	Silver Y	Noctua
Common Swift	Swifts	Small fan-footed wave	Geometer
Crambus Pascuellus	Micromoth	Straw Dot	Noctua
Dingy Dart	Noctua	Straw Underwing	Noctua
Dusky Thorn	Geometer	Treble Lines	Noctua
Flame Shoulder	Noctua	Vines Rustic	Noctua
Gold Spot	Noctua		