### Moth trapping at St Peter's Church, Stoke Fleming, night of 28-9 July 2023

We put out a light trap in the wildlife-friendly area of the churchyard. Moths are attracted to the light and end up in the box where, lobster-pot style, they don't find their way out. Most of them go to "sleep" in the empty eggboxes which we put in the trap. Early in the morning we open the trap and see what's inside. Once we've had a look at them, either the moths fly off or if they're still sleepy, we put them into nearby vegetation where they can safely hide.

There are about 2,500 species of moth in the British Isles (this compares with 59 butterflies). Of these, around 850 are "macro" moths and the rest are "micros" - which as the name suggests are often tiny (though not actually microscopic!). In one night we found 30 species in the churchyard; we counted 68 moths in the trap.

Like most insects, moths in general have been declining, in some case quite drastically. It's estimated that overall abundance of night-flying moths decreased by 40% between 1968 and 2007. But this decline hasn't been obvious to most of us, as we don't see the moths which are flying around in our gardens and countryside at night. Moths are crucial parts of the ecosystem – they're part of the food chain (with their caterpillars providing food for many birds) and important pollinators, notably for wildflowers (recent research has shown that moths are more efficient pollinators than butterflies). We need to look after them! Providing habitats and plants for them is a real help.

Below is a list with photos of the different species we found, and brief info about each. A range of shapes & sizes! The wildflowers and long grasses in the meadow area are definitely beneficial to many of these species. The trees around the churchyard also provide habitat for some of them.

(The photos are pasted in to come out a bit bigger than life size when printed on A4 paper).

#### Common Carpet



There's a whole group of moths called "carpets" – they do <u>not</u> eat carpets! but were so named by Victorian naturalists who thought their patterns looked like Persian(?) rugs. You may see Common Carpets flying by day, or notice them in the hedges if you walk along the lanes. The adult moths visit wildflowers for nectar, while the caterpillars feed on bedstraw and cleavers.

Purple Bar



Bedstraws are food-plants for this too; the moths like grassland as well as hedgerows and woodland edges.

**Red Twin-Spot Carpet** 



Food-plants are bedstraws, ground-ivy and wild carrot.

Brimstone moth



You might see these flying at dusk. Foodplants include blackthorn & hawthorn.

## V-Pug



There are 60-odd different species of small "pug" moths... this one is one of the more distinctive. Dog-rose, elder, hawthorn, bramble, hemp-agrimony, wild angelica, traveller's joy...

#### **Common Rustic**



A moth of grassy places; the larval foodplants are a range of grasses, and the adult moths also visit flowering grasses as well as flowers. It's very variable in colour and markings, but most of the 15 in our trap (they're abundant just at present) looked like this photo.

Rustic / Uncertain





Yes, there is a moth called the Uncertain! These two are hard to tell apart; both are small greyish-brown moths... but even these can be quite beautiful when you look closely. Their foodplants include primrose, dead-nettle, chickweeds and docks.

Common Footman



They come to flowers such as thistles; caterpillars feed on lichens as well as various plants including blackthorn, hawthorn & bramble.

Large Yellow Underwing



At rest on the ground they're well-camouflaged, but when they fly off there's a flash of bright yellow from their hindwings – probably to deter predators. They feed avidly at nectar flowers; larvae feed on a range of plants and grasses.

Lesser Yellow Underwing



Like the other Yellow Underwings, it loves to feed at flowers, while its caterpillars like nettles, docks & foxgloves among other plants.

Lesser Broad-bordered Yellow Underwing



#### Straw Dot



This small moth lives mainly in damp, tall grassy areas; it needs these tall grasses for food-plants. This is one species whose population has increased in recent years (possibly due to higher rainfall).

#### Crescent Dart



A coastal specialist; its habitat is rocky shorelines and cliffs, and in the UK it's only found along southern & western coasts. (A few miles away in Blackawton we haven't ever seen one.)

Flame Shoulder



Feeds at flowers, while the larvae feed on various plants including groundsel, plantain and bedstraws.

**Nut-tree Tussock** 



This furry moth depends more on broad-leaved trees; foodplants include hazel, beech, oaks and field maple, and it overwinters as a pupa in a cocoon amongst leaf litter or under moss.

**Iron Prominent** 



Another handsome furry moth which is associated with trees; caterpillars feed in hazel and alder amongst others. The adult moths do not feed during their flying life of a few weeks.

**August Thorn** 



The "thorn" moths have a characteristic shape and sit with their wings at an angle, a bit like butterflies. The August Thorn (which flies from July to September..) is locally distributed (not as common as some). It relies on trees, mainly oak but also beech, hawthorn and blackthorn.

Peppered Moth



Famously, a sooty-black version of this moth evolved during the industrial revolution, corresponding to high levels of air pollution in London & other cities (now, happily, that variant is much rarer). It feeds on a range of trees, shrubs and smaller plants including Michaelmas daisy and bramble.

**Ruby Tiger** 



This intensely-coloured moth – its body is deep pink – flies mainly in open areas; it has a range of foodplants including plantains and ragworts.

#### **Elephant Hawk Moth**



Looks nothing like an elephant! – it's named for its caterpillar, which resembles an elephant's trunk. The main larval foodplants are willow-herbs (think bright pink & green...); the adult moths feed on the wing at honeysuckle and other tubular nectar flowers.



**Black Arches** 



In various European languages this is known as the Nun, for its black & white habit. In Britain it's found in the southern half of the country. It relies on trees, mainly oaks, where it pupates in a crevice in the bark.

Clouded Magpie



Scarce in some parts of the country and patchily distributed elsewhere; its primary foodplant is elms (including wych elm) - so the effect of Dutch Elm disease must have played a part. Our moth was very bedraggled (we identified it by its yellow specked body); the photo is of a "fresh" moth.

Cloaked Minor



The adult moth visits flowers while the larva relies on flowering grasses.

**Dark Sword-grass** 



An immigrant; arriving during spring to autumn and probably not overwintering here. The adults are strongly attracted to flowers. (We initially identified this as a Turnip moth, but have adjusted after looking closely at the photo.)

Blood-vein



Favoured habitat is dense vegetation and meadows; foodplants include sorrel and docks.

#### These last four are micro-moths:

# Ringed China-mark



This one generally lives near ponds or ditches; its larvae feed in pondweeds. So we assume there must be something of that sort close by. Unusually, in this species males and females look quite different; this one's a female.

# Light Brown Apple Moth



This 1cm long moth can be found all year round. It makes use of a wide range of plants, shrubs and trees.

## Garden Grass-Veneer



These live in long grass; by day they rest head-down on grass stalks, which the larvae also feed on.

#### **Marbled Conch**



Tiny – only about 5mm long – but brightly coloured, this species is found in meadows, where the foodplants include plantains and yarrow.