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Butterfly Conservation

Saving butterflies, moths and our environment

Our August Hog

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In August 2020 a planned visit to Lydden Down by Butterfly Conservation Kent & SE London Branch in conjunction with Oaten Hill & South Canterbury Association had to be cancelled. The main objective was to see the Silver-spotted Skipper. With much help from conservationists, this species has made a significant comeback since the 1970s[1] – but it remains a local and even rare butterfly in Britain. In this article our President briefly explores the place of skippers within the classification of butterflies, offers a few thoughts on the scientific and common names of the species, and summarises its known biology and distribution in the UK.

At one time in the history of classification of the butterflies, the skippers ('Grypocera' – with hooked antennae) were considered to be distinct from the rest of the butterflies ('Rhopalocera' – with clubbed antennae), even to the extent that some considered skippers not to be butterflies at all, but a separate group in their own right[2(pl.6)]. Fast forward to the present, in the current era of our classifications being increasingly influenced by molecular data, the skippers are now confirmed as belonging to the Papilionoidea, the single superfamily that includes all of the familiar butterflies (plus a small and relatively obscure Latin American family of rather moth-like lepidopterans, the Hedylidae)[3]. Worldwide over 4000 species of skippers (family Hesperiidae) are now known, divided among some 500 genera and more than a dozen subfamilies – of which three are represented in the British fauna.

Previous page photo: Nigel Kiteley

What's in a name?

The silver-spotted skipper was given its first 'scientific' name by Linnaeus in 1758, as *Papilio comma*. Linnaeus's account of the butterflies in the tenth edition of his *Systema Naturae* is of course the baseline for the scientific names of all Lepidoptera. Linnaeus divided the butterflies and moths (Order Lepidoptera) into just three 'genera': *Papilio, Sphinx* and *Phalaena* (this last no longer in use). At the time they were equivalent to Suborders – and according to the contemporary English entomologist Thomas Yeats[4], Linnaeus's six subdivisions of *Papilio* were families [sic]. Linnaeus did not utilise the term 'family' – which today refers to a rank higher than genus, not lower as Yeats suggested (in many ways correctly in my view – but history has decided against his interpretation).

Indeed, the whole history of the application of Linnaeus's names for the butterflies and moths is in my opinion an illogical mess (for which he cannot be blamed!). Suffice to say that the first

widely accepted division of Linnaeus's *Papilio* was that introduced by his great entomological student Fabricius, who in 1793[5] divided the butterflies (including a few day-flying moths that had crept in) into two genera: *Papilio* and *Hesperia*. The latter more or less corresponded to two of Linnaeus's subdivisions of *Papilio* (families in Yeats's sense): the Plebeji *rurales* and the Plebeji *urbicolae* (literally, 'the common people of the countryside', and 'the common people of the towns'). Today these can be more or less equated with the Lycaenidae and Hesperiidae, respectively – in part thanks to Swedish naturalist Johan Wilhelm Dalman, who in 1816 selected *Papilio comma* to be the type species of *Hesperia*. So, in this nomenclatural sense, our Silver-spotted is the quintessential skipper.

What are the sources of the names? *Hesperia* is derived from the Hesperides, in Greek mythology nymphs of the evening or the golden light of sunset. Whether Fabricius was aware that some skippers typically fly at dusk seems to me doubtful. The name *comma* is, according to Peter Marren[6], more directly descriptive – he notes that in ancient Latin and Greek the comma mark can be V-shaped as well as curled, and for the Silver-spotted he equates the source of 'comma' as the white V-shaped mark on the hindwing underside. Well, there is certainly a clear V-shaped white mark at the base of cell R_1 – but there is also a very large *curled* white mark at the end of the discal cell!

Garden Hesperides by Edward Burne-Jones (https://commons.wikimedia.org/wiki/File:GardenHesperides_BurneJones.jpg)

What of the common name? Moses Harris noted that the species we now call the Small Skipper flies with "a kind of skipping motion" [6], which is perhaps the origin of Skipper. The adjectival Silver-spotted applies well to the underside, with a dozen or more whitish marks prominently on display (including the two 'commas'). Unknown to James Petiver (who called skippers 'hogs'), this species was first reliably recorded in the UK during the latter part of the 18thC as the Pearl Skipper, and then the August Skipper – but, for some reason, Haworth's 1803 name, Silver-spotted, has stuck[7]. Had he known this species, I

like to imagine Petiver would have called it the 'August Hog'.

Where to find?

Globally, the Silver-spotted Skipper is distributed widely across the temperate regions of North America, Europe, North Africa and the eastern Palaearctic, with as many as 30 subspecies recognised. Within the UK *Hesperia comma comma* has only ever been reliably reported from England. Although always most often found in the south-east, formerly it did extend rarely and discontinuously as far north as Yorkshire and south Cumbria[7]. Today, although known from about 250–300 populations[2], it is restricted to just a few southern counties: Dorset, Wiltshire, Hampshire, Sussex, Surrey, Kent, Buckinghamshire and Oxfordshire.

This local distribution and the flight period can be understood in terms of the microclimatic needs of the butterfly and its early stages, which are rarely found other than on south-facing chalk or limestone grasslands with a short sward maintained by cattle, sheep or rabbits[8]. Climate change, bringing increased warmth at the right stages of its life cycle, seems to be proving advantageous. Thus the habitat use of the Silver-spotted in England is now widening and its range increasing – albeit slowly due to its naturally very low rate of dispersal[9–11].

The ugliest caterpillar

Peter Eeles

Peter Eeles has recently given us a wonderful new account of the life cycle[11]. In late August and early September the white, dome-shaped eggs are laid on or close to Sheep's Fescue grass (*Festuca ovina*), in which stage they overwinter until mid-March. In the UK, *F. ovina* appears to be its only food plant. After hatching, individual or small groups of the pale-bodied, black-headed larvae (once said to be "the ugliest of all our butterflies'" caterpillars![13]) construct a loose silken tube wound together from fine grass stems. Here they rest at the base, feed, or continue tube-building. From time to time they eject their frass 'explosively' from the bottom of the tube – a habit found in many tropical species, and often thought to be a way of reducing detection by parasitoids – which can use volatiles emanating from larval faeces as a search cue. In July or August, the fully grown fifth and final instar, about an inch long, usually wanders away from

the hostplant, to form the pupa within a strong cocoon reinforced with grass blades[11].

Adults emerge from mid-July over a period of weeks, and are on the wing into early September. The males, which appear first, can be distinguished by the conspicuous, black, oblique 'brand' (androconial organ) on discal area of the forewing upperside. This is a very active butterfly, but it usually requires a higher ambient temperature than most of our native species before it will fly. This is one of the reasons why, in the past at least, a short sward with bare patches of earth has been so important for its survival in England[12].

Lydden Temple Ewell

The Lydden Temple Ewell National Nature Reserve at Lydden can be regarded as the 'headquarters' of the Silver-spotted Skipper in Kent. Most of our other Kent populations also occur in the Dover/Folkestone area, with just a few (including some re-introductions) elsewhere in East and Mid Kent (https://butterfly-conservation.org/butterflies/silver-spotted-skipper).

I hope that in summer 2021 we can try again to visit Lydden in search of 'Our August Hog' – and that the vital conservation work can continue. The support of all Butterfly Conservation members and volunteers is both greatly appreciated and needed more than ever.

Lydden Temple Ewell, Kent Wildlife Trust

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