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## Recent speckled wood (*Pararge aegeria*) butterfly observations in Lanarkshire (VC77), Scotland

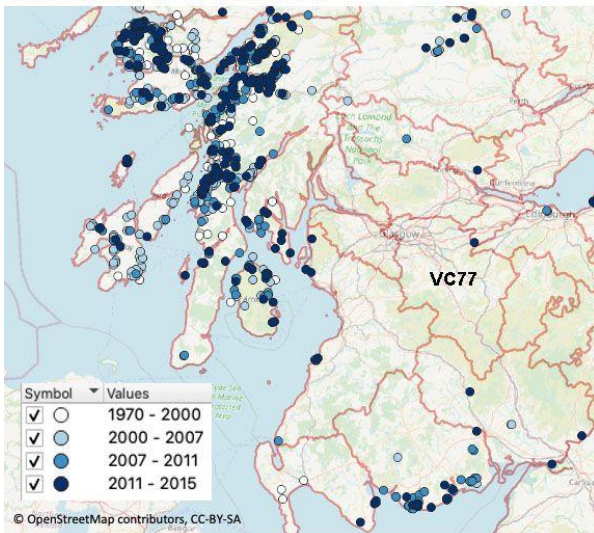
T. Stewart

7 Tay Court, East Kilbride G75 8XA

E-mail: [tamstewart2001@blueyonder.co.uk](mailto:tamstewart2001@blueyonder.co.uk)

The speckled wood butterfly (*Pararge aegeria*) is distributed across much of south-west Scotland (Fig. 1) (Butterfly Conservation, 2015). It is found in Argyll and the northwest, across Invernessshire as well as Moray, the Borders and Dumfries and Galloway (Futter *et al.* 2006). The butterfly had previously been long absent from south central Scotland and had not been seen or recorded in the Lanarkshire vice-county (VC77) recording area since the late 19th century. Emmet & Heath (1989) showed that by the early 20th century the population of speckled wood in the U.K. had mostly contracted to western areas such as Wales, south-west England and, in Scotland, parts of Argyll and the Moray coast.

Speckled Wood (*Pararge aegeria*)



**Fig. 1.** Speckled wood (*Pararge aegeria*) distribution in South West Scotland (1970-2015). Map compiled by the author using QGIS.

However, since the 1970s the butterfly has been considered to be expanding its range across the U.K. (Taylor-Cox *et al.*, 2020), and it has advanced into Scotland along east and west coastlines from Northumberland and Cumbria, respectively (Futter *et al.*, 2006). Barbour quoted in Sutcliffe (2009) stated that in northern Scotland the butterfly experienced a significant expansion in its geographic range between

1969-1984. Hughes *et al.* (2003) has suggested that evolutionary changes aid in these range expansions, with females at range margins having larger thoraxes indicating a greater dispersal ability.

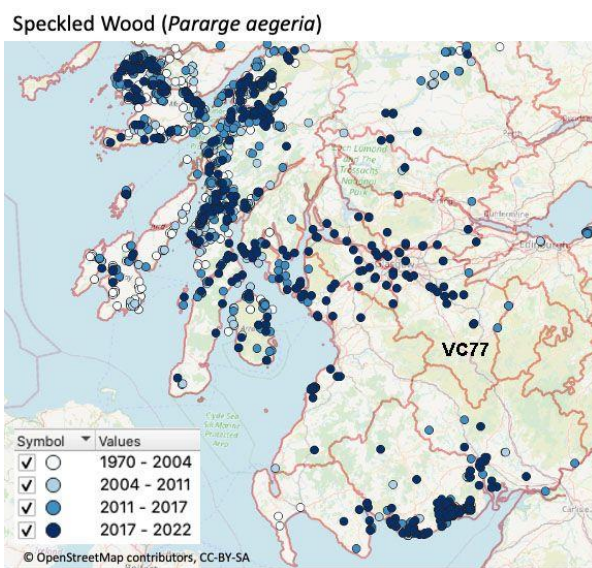
The earliest record of the butterfly in Lanarkshire is from 1876 at Cadzow, and no records of the butterfly in the county were received throughout the 20th century. With the observed expansion around coastal areas in Scotland, it was only a matter of time before it recolonised the vice-county and the species was first observed again in 2017 with a single record at a site south of Biggar and another at Dolphinton on 19th September. At Damhead farm, Yieldshields on 28th May 2018 another single sighting was recorded, followed by two records in late summer of that year, one in Carluke and another at Carmichael. The following year only one record was received, from Bishopbriggs, when a sighting of a single individual on 30th September was sent to Butterfly Conservation Scotland. During 2020 a record was received of one at Monkcastle Drive in Cambuslang in May, one was sighted at Plains in North Lanarkshire on 20th July and another at Flemington on 2nd August. In 2021 the only Lanarkshire sightings of the butterfly were during autumn with one on 2nd September at Kirklee allotments, Kelvinside, Glasgow, and two were noted on 5th September off Quarry Road in Law.

In 2022 eleven records of the butterfly were received, the first of the year being of an individual found on the U.K. Butterfly Monitoring Scheme transect at Greenhead Moss, Wishaw on the 27th April (Fig. 2). Evidence of breeding in the vice-county came with a single larva of the butterfly found and photographed at Easterbraes, Motherwell on 31st May 2022. RSPB Baron's Haugh gave the next sighting on 15th June. An adult was seen on the transect at Hogganfield Park, Millerston, Glasgow on 25th June and another was noted at Strathclyde Park woodland on 9th July. September brought four single sightings - at Adders Gill, Motherwell on 13th, at Hogganfield Park on 16th, in East Kilbride at K-Woodlands on 20th, and at Crossford on the Clyde walkway on 24th. The final records of 2022 came on the 2nd October at Easterbraes in Motherwell, and the last sighting of the year was on 21st October at Redlees Urban Park in Blantyre.

The 2017-2022 records of speckled wood in the Lanarkshire database of the U.K. Butterfly Monitoring Scheme (UKBMS, 2022) appear to provide evidence of speckled wood spreading into the vice-county from the south and east, and the records from Bishopbriggs and Kelvinside may be showing expansion into VC77 from the north and west (Fig. 3). It will be interesting to observe how this apparent colonisation continues with any further expansion throughout the vice-county in the next few years.



**Fig. 2.** Speckled wood (*Pararge aegeria*), Greenhead Moss, North Lanarkshire, Scotland, 27th April 2022. (Photo: T. Stewart)



**Fig. 3.** Speckled wood (*Pararge aegeria*) distribution in South West Scotland (1970-2022). Map compiled by the author using QGIS.

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