

Butterflies in Foxley Wood Mike Gasson

This is the original version of an article commissioned by Norfolk Wildlife Trust and published in the Eastern Daily Press & Evening News on Saturday June 4th 2016. The published version was co-authored with NWT's Steve Colin who added some extra dimensions. My photographs, used here, are different and chosen to best illustrate the text. Data from a new Foxley transect in the UK Butterfly Monitoring Scheme, started in 2016, is included after the article.

In addition to their inherent beauty and public appeal, butterflies are established as key indicators of habitat status. Their fortunes both nationally and locally reveal much about what is wrong and what is right with our environment, its ecosystems and its biodiversity. Whilst not a major wooded county, Norfolk retains some exceptional tracts of ancient woodland, amongst which Norfolk Wildlife Trust's Foxley Wood at 300 acres is the biggest and one of the best. It does, however, have a chequered history and its butterflies tell something of that story. Go back to 1873 for one of the earliest accounts in G. C. Barrett's "Lepidoptera of Norfolk" and Foxley features as 'the stronghold' for the Purple Emperor and 'the chief haunt' of the Silver-washed Fritillary. Sadly, both of these iconic woodland species were lost to Norfolk for the later part of the 20th century and the first decade of the 21st. Today one has returned but the other remains locally extinct as a breeding species.



Purple Emperor grounded in Fermyn Wood







White Admiral (top), Speckled Wood (middle) & Painted Lady (bottom) in Foxley Wood

Undoubtedly, the low point in the history of Foxley Wood was the impact of the post war obsession with rapidly growing coniferous trees. The Forestry Commission managed Foxley from the 1960s and, as was their policy at the time, clear felled half of the native woodland to replant with conifers. To add insult to injury the site was also subjected to aerial spraying with a toxic chemical defoliant, all of which sounded the death knell for the rarer and sensitive woodland butterflies. It is likely that even before this there were negative impacts from unsympathetic management that included removal of most of the saleable trees and the dominance of pheasant rearing interests.

The wood's fortunes changed for the better when it was acquired by the Norfolk Wildlife Trust in 1988 and since then management has been dominated by a desire to recreate the ancient woodland habitat. Removal of the foreign conifers has allowed the natural regeneration of broad-leaved woodland and the restoration of coppicing has started a dynamic cycle of wood harvesting and regrowth, creating varied habitats and a rich biodiversity. Once again Foxley Wood is a haven for butterflies.

The bluebell season attracts the most visitors and it is a time to see post-hibernation Brimstones, Peacocks, Small Tortoiseshells and Commas, as well as the new season Orange-tips. But there are great days to be had later in the year. Early July sees the appearance of the White Admiral, a graceful black and white aristocrat that floats around the wood stopping to nectar here and there, with a particular liking for bramble flowers. Their caterpillars feed on honeysuckle and ironically a little woodland neglect is no bad thing in terms of this climber's development. The areas of non-intervention woodland within Foxley will ensure that their food plant continues to thrive. There is a strong population of Ringlets and the more shady rides provide a favoured haunt for the Speckled Wood. This is a wonderfully understated butterfly in brown with cream that has a special appeal able to outclass some of the more colourful and ostentatious species. Then there are the occasional long distance migrants. Painted Lady is invariably present and there is always the chance of a Clouded Yellow.

Despite this impressive habitat recovery, Foxley has lost some of its most attractive butterflies. Norfolk could once boast of six Fritillary species. Marsh Fritillary, Pearl-bordered Fritillary, Small Pearl-bordered Fritillary and High Brown Fritillary are long gone, whilst the Dark Green Fritillary has clung on in its coastal dune habitats. That leaves the Silver-washed Fritillary, one of the biggest and most spectacular. Until recently, this was also lost to Norfolk, previously last breeding in Foxley Wood during the 1970's. However, 2010 saw a gradual spread back into East Anglia extend to Norfolk. Sightings began on 16th July and a single male was seen taking nectar from marsh thistle in Foxley Wood on 26th July.

Hope for the re-establishment of a breeding population was raised the following year. A search of dog violet at the base of oak trees revealed an early instar caterpillar and later a male and female pair were observed in courtship flight. Since then, sightings have steadily increased to the point where now Foxley is one of the best places to see the Silver-washed Fritillary. The appeal is immediate. They are strong fliers and the large, bright orange males are pugnacious, chasing anything that moves. Wearing orange clothing is said to be a good strategy for a close encounter! The species exhibits sex dimorphism and the female is a rather more subdued orangey brown. Some populations, including at least one in Norfolk, feature small numbers of variant "valezina" females with deep olive green wings. This beautiful butterfly inspired the famous artist and lepidopterist Frederick William Frohawk to name is third daughter Valezina. Interestingly, Frohawk was born in East Dereham, just a few miles away from Foxley!

The natural re-colonisation of Norfolk is part of a national trend that probably involves several factors. Climate change may play a part and some of the newly colonised sites are conifer plantations, suggesting an adaptation to these trees for egg laying. In any event, their return to Foxley is a massive endorsement of the restoration work that has been undertaken over the past two decades and in this case the habitat involves their traditional requirement for oak trees, dog violet and wide, sunny rides to facilitate courtship rituals.

Conversation about the Silver-washed Fritillary invariably leads to speculation about that other lost icon, the Purple Emperor. This is the undisputed king or rather emperor of butterflies. It is the only butterfly with its own species monograph and its own website "The Purple Empire". Enthusiasts, and there are many, refer to HIM (His Imperial Majesty), Monarch of all the Butterflies or High Spirit of the Midsummer Trees. One of the more eccentric







Silver-washed Fritillary
Female on Dog Violet (top),
Mating pair (middle)
& valezina female (bottom)

admirers, and incidentally a serious scientific expert on the species, paints a toe nail purple in honour of the flight season. Once encountered it is easy to understand the adulation. They spend much of their time in the high woodland canopy, making observation difficult, but the iridescent purple males are in the habit of descending to take salts. Whilst they favour dead things, they can be attracted by all manner of strong smelling foodstuffs and will happily land on their admirers. A certain mystery is also maintained with curious and poorly understood aspects of their lives. Males have a tendency to congregate at high points giving rise to the concept of master trees. In its Foxley heyday these were identified and their felling has been associated with a subsequent serious decline. As with the Silver-washed Fritillary success for the Purple Emperor requires a rather precise habitat. A good supply of shaded sallow trees is essential for egg laying and the best sites invariably feature mature oak trees. In its current state Foxley is in fact an ideal habitat for the species and maybe the future will see HIM return.

Foxley Wood is a great place to go butterflying and the marked nature trail is as good as anywhere to see the full range of species that are present in the wood. As with all butterflies, it is best to go on a warm sunny day. Try one in early July and you should see a good variety of butterflies, including both the White Admiral and the Silver-washed Fritillary, and venture down the more shaded rides to enjoy the lovely, understated Speckled Wood.

	Total	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
			April			May					June				July				August					September			
Small / Essex Skipper	10																5	4	1								
Large Skipper	4												1				3										
Brimstone	23	6	2	5		8													1			1					
Large White	29					1	4	2						1			10	4			1	2		4			
Small / Green-veined White	84						2	7			2					1	4	12	16	8	6	5	10	8	3		
Orange-tip	7			1		4	1	1																			
White Admiral	10														3	3	2		2								
Red Admiral	4																		1		1			1			1
Painted Lady	3																		1		1	1					
Small Tortoiseshell	1			1																							
Peacock	36	3	2	8		7	5				1			1				1	2	4	1	1					
Comma	26	4	1	1		1	1	1																2		13	2
Silver-washed Fritillary	44														1	2	14	6	10	6	3	2					
Speckled Wood	247						2	3	1		8	4	24	26	12	14	3	2	10	7	11	8	28	39	19	21	5
Gatekeeper	71															1	8	36	16	5	5						
Meadow Brown	65												1	1	3	13	5	16	11	10	2	3					
Ringlet	783													2	173	267	221	92	28								