

Introduced Plants in Wyre Forest

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Woodland ecosystems are robust and stable habitats that tend to remain the same over the centuries. Losses and gains of plant species are slow to occur and most species retain their hold even if conditions alter. Vegetation is dynamic but it goes through cycles responding to light levels and climatic variation. For a new plant to establish in a woodland it has to be capable of coping with the woodland dynamics, heavy shade in summer and competition with the established ground flora and canopy trees. Woodlands can be dry in summer due to transpiration, but can be very wet in winter.

Over the years Wyre Forest has maintained its flora, and most of the woodland plants that George Jorden recorded in the 1840's are still here and surprisingly few new introduced species have appeared, at least in the woodland itself. Other habitats have fared less well and marginal species of more open habitats seem worst affected to losses and new arrivals.

New plants do arrive and some persist long enough to be accepted as part of the woodland flora. However, many of these species still tend to be around the edges of the woodland, along rides or near the Dowles Brook where disturbance and light levels are greater. Here are a few to consider.

The first plant could be a new record in the Wyre Forest woodlands. *Solanum lycopersicum* (Tomato) often appears in disturbed habitats, urban habitats or the banks of the River Severn. I was surprised on 11 August 2012 to find a large clump of 20 healthy plants in the middle of Withybed Wood growing on a mulch of conifer needles. During the winter of 2011 most of the woodland had been felled removing all the mature conifer and leaving just a scattering of well spaced oak, all part of the conversion works from conifer back to native broadleaf on the National Nature Reserve. The site had been disturbed by the felling and extraction of timber but the ground was still covered by conifer

needle litter and had a very weak ground flora of stringy Bilberry and the occasional sprig of Heather. Maybe a forestry contractor had taken lunch sitting on the cut conifer stump and discarded an (overripe?) tomato on the ground. Luckily the seeds managed to germinate, missed any late frost and grew on to form a nice clump of plants. They were rather better plants than you might find in a garden centre in fact! No doubt the wet summer kept the plants growing. I did not return to see if the plants fruited but of course the autumn frosts will have finished them off, so there is no fear of invasive tomato spreading over the forest.

Vinca minor (Lesser Periwinkle) is a ground covering garden plant that has found its way into the woodland over the years. It is not new as George Jorden recorded it in 1856. Its spread has been slow but it can form dense patches well within the woodland excluding our native woodland plants. Like many invasive plants it starts to appear slowly then suddenly becomes more noticeable as it adapts to the woodland conditions. *Vinca minor* can be found scattered around the forest, but large patches occur on the Betts Nature Reserve near Furnace Mill and along the Dowles especially near Ford Lane and below Park House. In Arley Wood, Stourport it has become quite rampant towards the top of one part of the wood. It suppresses our native flora very well, so is a plant not to be welcomed and difficult to eradicate.

Impatiens glandulifera (Indian Balsam). This plant is so common along the River Severn you could be forgiven if you think it's a native species, although it arrived in Britain in 1839. Really there is little to be done about this species along the river as eradication is all but impossible, but on the other hand if it's not on a brook you really don't want it! The Dowles Brook, apart from a small section near the river, was free of *Impatiens glandulifera* until quite recently. As the plant spreads upstream by seeds, the flow of the brook prevented its spread aided by obstacles like bridges and culverts. Unfortunately, sometime after 2000, it appeared on the upper parts of the Dowles Brook. It could only have come from upstream, the most likely source being somewhere along the Lem Brook around Buckeridge. Perhaps someone decided to grow a few plants in a garden and it escaped into the wild? We shall never know, but it soon grew and seeded all along the Lem Brook. Storms and flooding provided ideal conditions for its spread. Bare ground along the brooks created by the floods was the perfect place for it. By 2008 it was well established and, although limited to the Dowles Brook valley, it soon became invasive into meadows and open areas, really important habitat for



Tomato plants, Wyre Forest

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Indian Balsam *Impatiens glandulifera*

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many insects. Can we eradicate it? Possibly it could be removed from the Dowles Brook and the side streams, but this is not easy and needs considerable manpower. At a time when money for conservation work is limited I wonder if we can achieve its removal. At least we should keep it under control. But this is an annual plant so every year it will grow back. Perhaps the good news is that the seed has limited viability, only a few years, so if it can be prevented from producing new seed it will not survive long. But it needs to be removed from all of the Dowles Brook catchment otherwise new seed will just float down in every flood event.

Aquilegia vulgaris (Columbine) is a native species in the forest but nowadays many plants are from garden origin or hybrids with our native plant. True native *Aquilegia* is getting hard to find and best sought away from Dowles Brook or any streams or tracks where garden seeds can float down or be carried along. Damp woodland well away from forest roads is the best place to look.

Corydalis solida (Bird-in-a-bush or Bulbous Fumitory) has been present as a garden escape along the lane near the old Far Forest railway station since 1910 when



Bulbous Fumitory *Corydalis solida*

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it was recorded by Carleton Rea. At first it was on just one side of the road but it has spread onto both sides of the lane and now can be found for some distance along the verges. It does not appear to be much of a threat to our native flora, and as yet not dominant. Will it advance into the woodland? It seems possible that seed could find its way down towards Dowles Brook and perhaps it is already there?

Not to be welcomed is *Hypericum x inodorum* (*H. androsaemum x hircinum*), (Tall Tutsan) a plant introduced possibly through forestry activity. Its appearance was quite sudden. I recall seeing the first plants in 2005, but as it looks so like our native *Hypericum androsaemum* (Tutsan) that it could have been overlooked for several years before then. Our native plant is found in wet areas, stream valleys especially with flushes, or on steeper banks with seepages. *Hypericum x inodorum* is happy on much drier ground and seems to spread by seed especially along disturbed edges to rides and trackways. To start with it was only found locally in Withybed Wood, but by 2010 it had appeared along the Forestry Commission's roads and has since spread rapidly and might now be all along the forest road network. It seems to tolerate some shade and a few plants have been found along the smaller trackways in dense woodland. How it might affect our native *Hypericum* is unknown, but as a plant it is invasive forming tall, dense thickets if allowed to grow. This is a species that could become hard to eradicate and might become a future problem.

Along the River Severn on the east bank below Eymore can be found *Impatiens parviflora* (Small Balsam) first recorded there in 1932. It is a delicate plant with yellow flowers much smaller than Indian Balsam, and

not so invasive. It survives along the wooded trackway west to the river because of the regular flooding and disturbance by walkers. As yet it does not appear to be spreading into the rest of the woodland away from the river. Another site for the plant is Oxbind Coppice, Callow Hill, and here the plant has a different rather bizarre habitat. Sometime in the 1960s local domestic rubbish was dumped in the woodland and spread along the main trackway. It is not certain if seed was present or if it came from elsewhere, but by the 1970s *Impatiens parviflora* had appeared. Even by 1990 it was still localised, scattered along part of the track where the rubbish had been dumped, and it had not spread further along the track or into the woodland. Around 2005 heavy rains had exposed the rubbish and the owner did what he could to collect and cover the rubbish and stoned the track way. This disturbance triggered a sudden spread of the plant along many of the forest tracks where rubbish had not been tipped. One possible explanation for the sudden spread was that the disturbance had allowed a mass germination of plants whose seed was then spread along the other tracks by people walking. Back in the 1970s the woodland was little used by people but, like many areas in the forest, public use has increased dramatically since. How far the plant will spread is not known but if it reaches the Dowles Brook valley it will surely thrive even if we wish it not to.



Both Small and Indian Balsams, Oxbind Rosemary Winnall

Not all introduced plants are problems. Some can be quite attractive and even be interesting additions to native flora. In 1980 I found a clump of *Erica vagans* (Cornish Heath) well established by Beaucastle Pool. It persisted for several years then vanished. In 2011 Brett Westwood showed me a much larger clump not far away at Hitterhill, near a site where an old house had stood in the 1970s. The plants were tall and well grown, but had not spread very much. But how long will it persist? This is one species that appears to hold no threat to our woodlands, and it's good for bees and other insects!

The shrubby *Symphoricarpos albus* (Snowberry) has found its way into the forest in many places especially

along the river and in hedgerows. It appears to prefer the richer alluvial soils along streams and has not spread into the more shallow acid plateau woodlands. But where it does occur it forms dense thickets. In some woodlands it can thrive under the canopy shade and has been used for pheasant cover, but most of Wyre Forest has soils too poor and shallow, so let's hope it will be kept in check.

Buddleja davidii (Butterfly-bush / Buddleia) has a good reputation because of the nectar it provides, but it can be invasive. It needs a shallow soil and some lime to grow well, so Wyre is too acidic for it to really thrive, although it could spread along rides and trackways. The tendency is to leave this plant because of its value for butterflies. However, it has no place in Wyre Forest other than gardens, and that is where it should remain.

Lonicera xylosteum (Fly Honeysuckle). This is one of the plants that appears to have come in with the railway, although in some woods it was planted as gamebird cover. It is still very rare in Wyre and nothing more than an unusual plant that is worth seeking out. It is quite spindly with soft leaves and small red berries. One large bushy plant survives on the railway near Dry Mill Lane and another near the Betts Reserve. The largest bush I have seen was at Birchen Park where it may have been planted for pheasant cover. But why only 1 bush?

Juncus tenuis (Slender Rush), a native of North America, spread in the late 19th century over much of western Britain. In the 1970s it was uncommon in Wyre Forest, but soon started to appear along the rides and tracks. Now it is nearly everywhere and often abundant on damper rides and verges. Thankfully it is a slender plant and does not swamp our native species, although it can occur in dense patches. It seems to grow on the grassy rides especially if damp and a little trampled, and does not really invade the woodland. Perhaps it is not very welcome, but as yet no obvious harm appears to have been done to our native species.

Crocsmia x crocosmiiflora (*C. aurea* x *pottsii* (Montbretia)) is a colourful naturalised plant typically seen along forest roads and roadside verges. Several large clumps can be seen walking down from Earnwood to Dowles Brook along the main forestry track. It forms dense invasive stands and appears to spread quite well, if rather slowly. Possibly the shade of the woodland canopy might prove too much for it, but it has the ability to spread along forest rides all too well. In time I suspect we will regret having this plant, but as yet it is too scattered to cause much worry. But that's how most invasive plants appear to be at first!