



Chrysosplenium alternifolium (left) and *C. oppositifolium* (right) - photo Martin Buckland

Special Covid Edition No. 1

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Editorial

We hope that you are all well and have managed to make the best of the last 6 months.

A number of members have been active on the WhatsApp site, where there have been some interesting posts and identification challenges. If you haven't posted yet then do! Contact Dave at d.green7@btinternet.com if you want more information on this.

The committee met by Zoom last week and our main focus was on how we can engage better with our members and restart our Field Meetings.

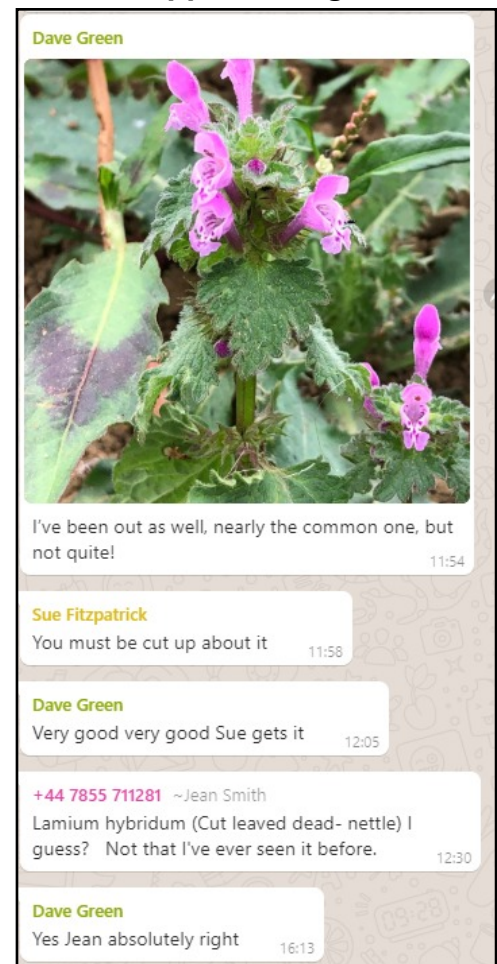
One decision was to produce a short newsletter every month or two. This would probably be a download for those on the Internet, with a printed copy sent to those who are not. Here it is. We would like to include articles from members about interesting experiences or finds. Information about a favourite plant or group of plants would also be welcome. You could also comment on articles in a previous newsletter or add to them. Do contribute.

As you will have realised, we cannot make any firm plans for next year. If possible, we hope to run a revised version of this year's programme from spring 2021. We will always follow the government guidelines that apply at the time of any meeting. The committee will ensure that meeting leaders are supported and that all relevant risk assessments for insurance requirements can be met.

Depending on conditions at the time we may try to take part in the BSBI New Year Plant Hunt.

The newsletter starts with an account of our last field meeting before lock down.

A WhatsApp exchange



Sunday 23rd February 2020

Bentley Wood: Identification of winter twigs

– a workshop using John Poland's book, 'The Field Guide to Winter Twigs'

It was clear the moment I entered the cabin within Bentley Wood that Pat had put a lot of effort into today's meeting. The table was lined with perhaps a dozen samples of pre-cut twigs ready for examination with a flip-chart at the ready together with prepared diagrams and notes. A few members also brought twigs of their own to throw in the mix – today was going to be serious!

The thought of looking through keys is not my first choice or best case scenario and perhaps not a little daunting but is this because I and others don't understand the descriptive phrases? Well, top marks to Pat, with Poland's book as our guide she made us start with just some of the following essentials...

Stipules are bracts, often leaf-like in structure that occur in pairs on a twig at the base of a petiole. When the bracts fall with leaves in autumn, they leave a scar but not all species do this so that is a diagnostic in itself. The shape and size of the scar is examined.

Leaf scars are the marks left behind after leaf fall where the petiole joined the stem. Like the bracts these are noted for size and shape, but they may also be raised and/or coloured.

Bundle scars are marks within the leaf scar. These show the severed ends of the vascular bundles or veins to a leaf. They may protrude or be sunken, vary in number and shape.

Interpetiolar ridge. Most species with opposite leaves have an interpetiolar ridge; a narrow horizontal structure connecting the two opposing leaf scars. Shape or absence are also key diagnostics.



Pith is the soft tissue in the central core of a twig. Making a clean, square cut across a twig will reveal this and one should take note of the relative size and width, shape and colour of the exposed tissue.

Further, by slicing up through the end of a twig and then cutting through at right angles to the middle to remove a half-slice of the stem, a length of the pith at the core is revealed. This too can vary in shape; it maybe solid, spongy, chambered like a ladder or have longitudinal grooves.

Bud morphology. Buds occurring in the leaf axil above a leaf scar are known as lateral buds; they are usually single but sometimes clustered and they are held on a twig in only a few patterns; alternate, opposite or whorled. Buds at the tip of the twig are known as terminal buds. They are usually single and are often larger than the lateral buds. In other cases there are false terminal buds which are lateral buds closest to the twig end. They can be single or in pairs. Leaf buds and terminal buds also vary in shape and colour, may have scales or hairs or none.

That is a very simplified and shortened version of what is available in the keys but when it is told to you a bit at a time in a methodical manner it all begins to make sense. Firstly, Pat gave us samples of trees or shrubs that would show us a variety of the individual components of a twig. Once satisfied that we understood and saw the different patterns or shapes, Pat then set us off on a species we were familiar with and so we all started with a look at Beech *Fagus sylvatica*. I have to say with just a little of the learning above I could follow my way through to the end quite easily. Sure, you may go off on a tangent, but you can always go back to where you think you went wrong. The other benefit I found from the exercise was that I got to see aspects of twigs and buds I would not normally look at. How often do we record plants without having a good look at them?

Other plants of the day were Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa*, Common Lime *Tilia x europaea*, Lilac *Syringa vulgaris*, Red Alder *Alnus rubra*, Walnut *Juglans regia*, Wayfaring-tree *Viburnum lantana*, Guelder-rose *V. opulus*, Common Whitebeam *Sorbus aria*, Tulip-tree *Liriodendron tulipifera* and Sumach *Rhus typhina*. Out in the field we looked at Field Maple *Acer campestre*, Wych Elm *Ulmus glabra* and Goat Willow *Salix caprea*.

Poland's guide covers just over 400 trees, shrubs and woody climbers and the beauty of it is that not only does it have drawings of every plant it also has photographs of buds at the back. Keys, drawings and photographs – buy it!

I would also like to plug another book and one you may want to start with, to get to grips with some of the key descriptions; Field Studies Council: Winter Trees: A photographic guide to common trees and shrubs by Dominic Price and Leif Bersweden. This book covers just 36 common species and has excellent text and photographs – Buy this one too!

Lastly, I must thank Pat for such a good and well prepared day. I am quite certain that all who attended gained much from the exercise.

Martin Buckland

Early Spider-orchid

Ophrys sphegodes

***Ophrys sphegodes* in Wiltshire?** In VC7 there are just two records, at Martinsell Hill SU16 for the years 1930 and 1931 and for VC8, just a few more records with the first at Woodford SU13 in 1885 with the last at Downton SU22 in 1988.

FACT SHEET

- First orchid to flower in the UK - from Late March to May.
- Typical size, 5 to 20cm*.
- Flowers, 2 to 7*.
- The lip of the flower resembles the body of an orb spider, hence its name.
- The lip is purple-brown and typically with an H-shaped mark.
- It is closely related to Bee Orchid *Ophrys apifera*.
- Prefers grazed chalk, alkaline meadows, near the sea.
- Found along the cliffs of the south coast from Dorset to Kent.
- Although restricted to these counties it can occur in hundreds locally.
- The flower releases a scent of a female *Andrena* bee to attract a male *Andrena nigroaenea*.
- The male attempts to copulate with the flower but only get two pollinia attached to its head for its trouble.
- The dissatisfied bee flies off toward another Early Spider flower that smells just slightly different enough from the last to be a real bee...and deposits the pollinia to fertilise it.
- Plants are not long-lived and do not propagate vegetatively very well preferring seed dispersal.
- Early Spider-orchids need managed, sheep-disturbed ground, to aid seed germination.

*A site at Samphire Hoe in Dover was used for the dumping of chalk spoil from the building of the Channel Tunnel. Early Spider-orchids that have colonised there have been known to grow to 45 cm and with as many as 17 individual flowers.

PS: we hoped to have seen this species at our aborted meeting to Durlston Country Park, April 2020.

References:

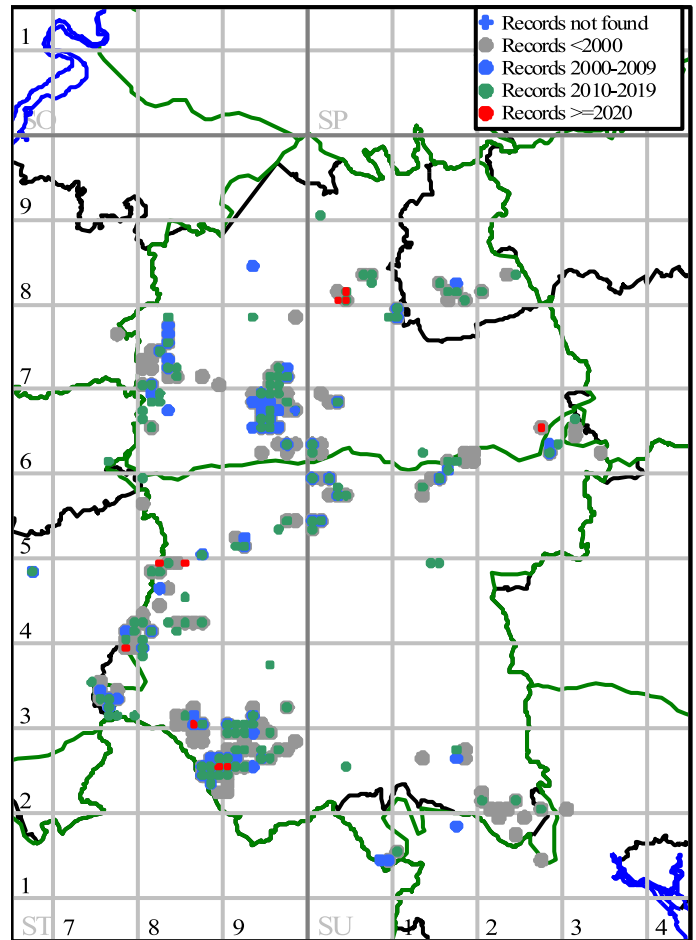
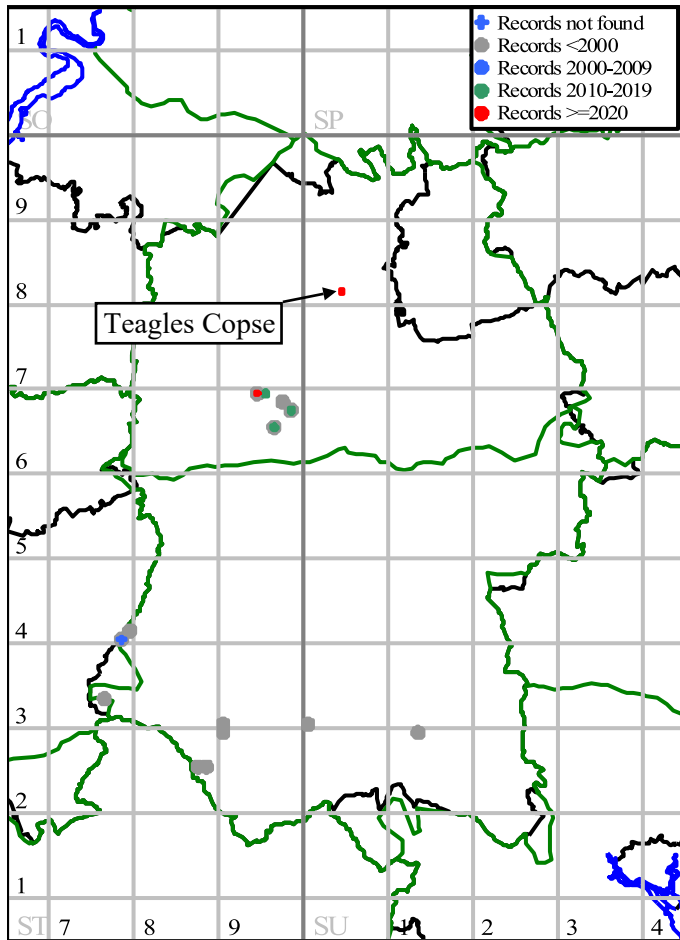
Plantlife: Discover Wild Plants.

Orchids of Britain and Ireland by Anne and Simon Harrap.

The Orchid Hunter by Leif Bersweden.

Martin Buckland





Golden-saxifrages

On 20th March 2020, the sharp eyes of Dave Green and Martin Buckland found patches of Alternate-leaved Golden-saxifrage *Chrysosplenium alternifolium* on a stream bank in Teagles Copse near Royal Wootton Bassett. This small but delightful strip of woodland, with a public footpath running through, is beside the A3102 towards Lyneham. Woodland stream banks are typical habitats for the golden-saxifrages, but the alternate-leaved one is very scarce in Wiltshire. You will see from the left-hand distribution map that there are only three areas with recent records for *C. alternifolium*, with a number of sites in the south that have older records.

Dave and Martin's search was prompted by an old record; in 1934, Donald Grose recorded the plant 'in two places on the stream flowing through Tockenham Wick' (Tockenham Wick is nearby).

Martin's cover photograph was taken at this site and includes Opposite-leaved Golden-saxifrage *C. oppositifolium*. This is much more widespread, often being found in carpets along stream banks in wet woodland, but usually in the absence of *C. alternifolium*.

Why *golden-saxifrages*? The photo on this page, taken a little later at the same site, shows the flowers; anthers are bright yellow and other floral parts become increasingly yellow as they mature.





Wild Service-tree *Sorbus torminalis* in Wiltshire

- a personal perspective

An update on the distribution in North Wiltshire

I have taken a special interest in this tree after studying *Sorbus* species on the Great Doward in Herefordshire where Wild Service-trees grow in greater profusion than I have ever seen anywhere else.

On returning to Wiltshire in 2014, after a 10 year absence, and becoming active in the BSBI Atlas 2020 project, I was very interested in looking at the present distribution of species that I was involved with as part of the 1984 to 1992 tetrad recording scheme and which was used in the publication, the Wiltshire Flora.

The premise for the 2020 Atlas project was to record all species to at least to 1km square level, and for all those rare and localised species to a specific and detailed grid reference. These criteria were very similar to those for the Wiltshire Flora, the exception being the recording level.

Although these 1984-92 records still exist, they are all, except for a few cases, lacking in useful data. Most are detailed, at best, to only a 6-figure grid reference, making them very hard to re-find. Furthermore, there is not often any mention of status, number of trees, or whether they are standard trees, coppiced or flailed in a hedge etc.

My intention, therefore, was to:

- 1) ascertain if the trees still existed in their recorded location;
- 2) count the number of trees in each location;
- 3) record the status;
- 4) focus on change since the publication of the Wiltshire Flora.

History

Wild Service-tree is not considered a rare tree nationally localised wherever it grows. It is a bellwether indicator species for ecologists and botanists and significant as an ancient woodland indicator.

This tree occurs from the English Channel, north to the Midlands, with a few occurrences further north again but the heartland is southern and south-western England and the Welsh borders. It is only found associated with ancient woodlands or ancient hedgerows.

The New Atlas of the British and Irish Flora 2002 recorded this tree as growing in 453 10km squares, covering at least 53 vice-counties in the British Isles.

Finding trees in new areas is very uncommon. In recent years, local authorities have taken to planting Wild Service-trees and although the majority of these will be evident to the recorder some may be wrongly classified as native in the future and so influence the statistics.

Many individual trees, in hedgerows or small populations in woodland, have been recorded at the same location for decades or even centuries. They perpetuate themselves predominately by sending up new suckers from the root stock,



particularly from maturing specimens and when this happens the result is either one large ring or a number of smaller rings of trees that if plotted on the ground may have a circumference of over 10 metres. This particular trait of suckering means that individuals can grow very close to each other and as they mature in turn, the parent tree dies leaving just a circular stand.

Wild Service-trees do produce fruit in the British Isles, but the summers are deemed too cool for them to ripen enough for viable seed. However, when ripe fruit does fall to the ground or the seed is dispersed by birds, it needs to undergo vernalisation in order to germinate in the spring. That said, in recent years, perhaps with climate change, young saplings are beginning to be found e.g. Ravensroost Wood.

I collected seeds in 2009 from the Doward. One germinated in 2011 and I grew this on until it outgrew the pot. It now resides in the garden of Helena Crouch and is over two metres tall.

Wiltshire context

In John Audrey's Natural History of Wiltshire 1685, is the first record of Wild Service-trees in the county, growing at "Grettwood in the parish of Grettenham" (Grittenham), and it still does (see Great Wood, below).

In later publications, the 1957 Wiltshire Flora by Donald Grose and the Supplement to the Flora of Wiltshire by L.F. Stearn, brought the number of locations up to 19. In the subsequent years, with the formation of the Wiltshire Wildlife Trust, and active recording within the county by government agencies, a total of 47 locations were noted.

With the Wiltshire Flora project came computerisation, and finally, precise locating of the records (by the use of grid references) during the period of 1984 to 1992; this documented that the tree occurred in 45 1km squares.

Recording of the 2020 BSBI Atlas

In 2016, I decided that I would attempt to check on all the Wild Service-tree sites, firstly within the immediate vicinity of where I live in Wiltshire, Bradford-on-Avon (VC7), before venturing further.

My recording, still on-going, has meant visiting historic sites, many of which have not been systematically surveyed for Wild Service-trees either at all or for at least a very long period. The optimum time to search for them is in late September /early October when the leaves turn to a very distinctive golden, red-brown standing out especially well when 'hidden' at other times in woodlands.

The historic recording of Wild Service-trees often shows only the documentation of occurrence or location, and not the number of trees present. My survey was intended to refine and pinpoint their locations using eight or ten figure grid references, to count the number of specimens, comment on the growth mode and note the approximate size of the trees.

Results

Although the majority of sites I have visited are in VC7, I have not yet managed to reach every known site in Wiltshire. During my survey, I visited 26 locations in three seasons and during this study, I saw Wild Service-trees at 21 sites in both north (VC7) and the south (VC8) Wiltshire.

I was successful at the majority of the sites and in almost all instances I found multiple trees at each location. Only four native sites produced single trees, i.e. with no suckers or 'offspring'. At three locations I was unable to re-find the previously reported trees; one of these was because the hedge had been grubbed out and the other two I believe were due to inaccurate grid references. However, as part of my ongoing study I have independently located Wild Service-trees at five new sites.

Great Wood, Grittenham

I visited this wood with Martin Buckland on two occasions over two seasons. During our initial, three hour visit, we found Wild Service-trees in 42 separate locations, covering three 1km squares and counting 162 trees. This, surely, must be one of the highest concentrations of this tree within the British Isles.

These finds have been turned into botanical records, giving the number of trees at each location, with their growth form, grid reference and notes on size etc. After visiting Great Wood on the second occasion, the total came to 186 trees in four 1km squares. The records are on our Wiltshire database and can be viewed on request.

Assessment County-wide

The overall status of the species in Wiltshire does appear, from the samples I have analysed and from the data of existing sites, as stable. However, it is difficult to draw any firm conclusions since we are not comparing like for like. We do not have sufficient historic site detail to be able to revisit specific historic locations. One thing we can say for sure is that there has been loss of individual specimens due to habitat destruction.

The paucity of records from some historic sites may be caused simply by the lack of focused hunting-out of the species. What is changing is that we are getting better coverage both of surveying and of new records (including finding new locations) and we are defining the known populations better. It would appear that the more recording we do, the more we will find. From this it is possible to conjecture that the ancient wooded landscape of Wiltshire had historically covered a greater area than we realised based on the premise of Wild Service-tree being the ultimate indicator of ancient woodland.

Acknowledgments: I would like to thank Martin Buckland for accompanying me around Great Wood and other woods, plus struggling through lots and lots of brambles; and for comments and additions on this text.

Dave Green

Other publications

Dave Green has an article on Downy-fruited Sedge *Carex filiformis* in the latest BSBI News (September 2020, no. 145). This plant, first recorded in 1799, is found mostly in the upper Thames catchment area. Dave reviews old records and correspondence, adding his own and other more recent finds.

The same issue has a letter from Martin Buckland, "Memories of *Pilea microphylla*". Also known as rockweed, artillery plant or gunpowder plant, Martin used this strange little plant as greenery in planting schemes when he worked at Moredon Nurseries in Swindon.

Contacts

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Ali gives scale to a tree - Dave Green