PRESIDENT'S LETTER

This month I will use my space in the Magazine for a review of a book that should be of interest to many of our members. If you like wild flowers you will like this book. I am fortunate to have received an advance copy of *Wildflowers for the Queen* by renowned photographer Hugo Rittson Thomas, published by Wildflower Press. This beautiful and spectacular book is a celebration of Britain's Coronation Gardens. This was a wonderful idea of the Prince of Wales to establish wild flower meadows in honour of the 60th anniversary of the coronation of the Queen in 1953. Owners of wild flower meadows in various stately homes and estates were invited to donate seeds from their meadows to establish new wild flower meadows and, as a result, so far ninety new ones have been created. This was a great way to celebrate a jubilee event as it has stimulated so many new areas of meadow for our native wild flowers. When one thinks of the stately homes and gardens of Britain one tends to think of overbred cultivated varieties of plants, but this book shows how many estates, from Mull to Cornwall, have extensive areas of the wild flowers that we love so much and from which the seeds for the new meadows were collected. This book is based on the beauty of wild flower meadows in twenty of these well-known Coronation Gardens and farms. It will do a lot to promote the importance and beauty of the British flora.

The photographic illustrations of this book are beautiful whether they are of stately homes, wild flower meadows or of individual species of plants or even part of plants displayed in still life. It would be hard

for me to say which is my favourite photo in this book as there are so many spectacular ones. Some brought back fond memories to me, such as those of the Fritillary *Fritillaria meleagris* in Magdalen College meadows which I visited each year while I was a student at Oxford. The Cowslips *Primula veris* and the Bluebells *Hyacinthoides non-scripta* at Tusmore Park in Oxfordshire are beautiful. I love the images of Great Burnet *Sanguisorba officinalis* at Loughborough Big Meadow in Leicestershire. Like many of the other species illustrated the Great Burnet is displayed in several different ways, in the meadow, in a still life and in two different artistic arrangements on a white and on a black background. Orchids feature in many of the meadows and I particularly like the images of the now, very rare, Monkey Orchid *Orchis simia* at Park Gate Down in Kent. Many of these displays are fine works of art portraying some of our most important wild flowers. Appropriately in a book on wild flowers for the Queen, some of the finest images are of the meadows in delicate light on the Sandringham Estate.

In addition to the most readable text about each of the twenty featured meadows are a few short statements about their love of wild flowers from well-known people such as Julian Fellows, Miranda Brooks and Alan Titchmarsh.

I remember as a boy often wandering in the meadows of the Cotswolds that were full of buzzing insects and scents of the many wild flowers. It is a tragedy that over the last seventy years or so we have lost so many meadows and the insects that prosper in them. The project on which this book is based is heartening as it has stimulated the creation of new meadows for our wild flowers. Once a new meadow has been established it is surprising how soon the native plants colonize and the insects start buzzing. Here in Dorset I often visit a comparatively recently created meadow at Hilfield Friary, near Dorchester, that is now about fifteen years old. It is exciting to see several species of orchids there and many of our typical meadow plant species.

The idea on which this book is based was because Prince Charles was concerned by a report from Plantlife on the status of meadows in Britain and so, as a result, he initiated the Coronation Meadow project. Another good thing about this book is that the sales will contribute to the funds of our sister organisation Plantlife, so you will be helping wild flower meadows if you buy this book. You will not regret the purchase.

GHILLEAN PRANCE FRS, VMH

The book is available from the following website
http://www.hugorittsonphotography.com/
The publisher is offering a 10% discount to members of the WFS for the month of January. Use the code WFS10.

EDITORIAL

Welcome to 2021 and what will, hopefully, be a brighter future. Looking on the optimistic side Janet has, yet again, compiled another excellent programme, with some repeats of events that were scheduled for 2020 and some new ideas. One of the new ideas is to extend our summer field programme into the leaner months, when botanising outdoors is less productive and the day light hours are shorter. Over lockdown many of us have engaged in video conferencing, using platforms such as Zoom, Skype and Teams, so we thought an online programme would give us all the opportunity to meet up outside the normal field meeting season. Do try and join us for one of these virtual meetings. Details are given in the Year Book.

By now, many of you will be part way through your Winter Months Hunt. With milder winters becoming the norm, members are finding more and more in flower at this time of the year. The report on last year's hunt appears on page 21, followed swiftly by the Spring Hunt report for 2020 on page 25. This is one to pencil into your diary. How many plants can you find in flower in the first week of March? Pauline and Richard Wilson have also delved into the Spring Hunt Archive and have made some interesting observations.

Peter Leonard has produced another superb identification sheet for our centre-page spread, this time looking at some of the difficult to distinguish yellow composites, concentrating on the Cat's-ears *Hypochaeris* spp. and Hawkweeds *Leontodon and Scorzoneroides* spp. In addition, Peter Llewellyn provides an excellent summary of our native Hogweed *Heracleum sphondylium* and the introduced Giant Hogweed *H. mantegazzianum*. This is followed by one of our grant recipient's reports on their project into hybrid Hogweeds.

Every year the Wild Flower Society awards grants to a wide cross-section of societies and individuals for activities involving botany, notably in conservation and education. Recipients of these awards provide feedback to the committee on how these monies have been spent. Some of these reports are published in this magazine so you can get a feel for how the Society's money is spent.

Finally, for those of you who would like to stretch the brain cells over the festive season, this issue of the magazine includes a couple of quizzes as an indoor botanical challenge. Enjoy.

ANNE KELL

Copy date for Spring magazine
1st February, 2021

NOTICES

AGM Voting
Thanks to all the members who cast their votes in the AGM ballot. We received 52 votes, all in favour of the four items listed. Our quorum is 30, so all the proposals have been accepted. Helen Dignum was voted in as a new member of the committee to replace Jill Oakley, who had served her four year term. Our thanks go to Jill for her valued contributions over those four years.

In response to the invitation to submit questions to the Executive Committee, we received a suggestion that the membership fee should be increased to £20. (It has been at the current level of £10 since 2001) The E.C. will discuss the proposal at a future meeting.

Change to Branch Secretaries
As from 2021, David Bevan has retired as Branch Secretary for Branch V after holding the position for 31 years. However, he will receive your 2020 records and monad lists and will write the reports on them for the magazine. We are very grateful for everything David has done for us over the years. Mrs Sue Buckingham has kindly agreed to take over responsibility for the branch. Her contact details are given in the Year Book.

Presidents' Award
Awarded jointly by the WFS and BSBI every year, this year's recipient was Alan Leslie for his *Flora of Cambridgeshire*. Our President, Sir Ghillean Prance, stated that "it is an excellent example of a local flora". Alan wrote in response:-
Thank you for your letter and the Certificate relating to the Presidents' Award for 2020. I am sorry this could not have been presented at the WFS AGM, but nevertheless I was very pleased to receive it and indeed am impressed with its appearance. I feel the WFS garland in particular contributes a great deal to its attractiveness.


BOTANICAL SOCIETY OF BRITAIN & IRELAND
and
WILD FLOWER SOCIETY
PRESIDENTS' AWARD
RECIPIENT FOR 2020
Dr Alan C. Leslie
for his book
Flora of Cambridgeshire
Botanical Society of Britain & Ireland
Signed
President BSBI
President WFS

New Website
The society has started the process of appointing a professional web developer to rebuild our website. One of the new functions of the website will be to allow different people in the society to update it. For instance, Janet John will update all matters connected with meetings, Anne Kell will do the same for the new magazine section and so on. Our site is quite large and there are still other sections which have no-one to 'look after' them. If anyone is interested in becoming a website updater, please contact Peter Llewellyn on wfs.chair@gmail.com or phone 01928 722058 (Call minder in place). Training will be provided for all of us.

THE HOGWEED CONFUSION

In the British Isles and Ireland there are two species of plant in the genus *Heracleum* which are commonly confused and about which frightening stories have been published.

The first is our native Hogweed *Heracleum sphondylium* which begins to flower on roadside verges and almost anywhere in the countryside around late May and June. It begins to flower when the Cow Parsley *Anthriscus sylvestris* has almost finished and is in fruit.

Photo: Dennis Kell

Hogweed

The second is Giant Hogweed *Heracleum mantegazzianum*, a plant from the Caucasus, introduced for the use of gardeners in the 19th century. It has escaped into the countryside and can be invasive locally. It flowers in mid summer.

The main problem though is not that either crowds out other plants wherever they flourish, like so many invasive plants, but that both have an irritant sap. In the case of Giant Hogweed the sap can, on exposure to ultraviolet light, cause skin blistering and even severe burns requiring hospital treatment. Horrific images can be found easily on the internet giving the impression of a deadly plant which must be avoided at all costs. Tales of young children making peashooters from the stems and receiving bad blisters or burns around the mouth are examples.

The Giant Hogweed sap like nearly all members of the *Heracleum* genus, contains furocoumarins such as psoralen. These are chemicals which readily absorb ultraviolet light and cause it to form permanent, irreversible bonds with RNA and DNA in human skin cells. This leads to the death of those cells and a very real possibility of bacterial infection of the affected area making the whole injury

Giant Hogweed

Photo: Anne Kell

a lot worse. The serious phytophotodermatitis, as it is called, does need the sap, and therefore the furocoumarins, to be activated by certain frequencies of light in the ultraviolet spectrum. If the cloud cover is such that those frequencies of light are absent or severely reduced then the severity of the skin irritation is much less. If the skin is blistered, it will eventually heal but because the furocoumarins are fat soluble, they penetrate the skin during initial contact and may cause a reddening of the area after healing which can last for a long time, sometimes years.

It is understandable therefore that local government, landowners, park authorities and farmers are keen to get rid of Giant Hogweed. Even that isn't simple though. The usual tool for levelling rough areas is the strimmer which has a rotating flail and in theory cuts through even the toughest plant stems. In this case, it does so while scattering the dangerous sap and plant remnants in all directions so full body protective gear must be worn and thoroughly cleaned afterwards. Strimming or hacking at this plant without protection is a sure way to become affected by the sap.

Our native plant, Hogweed also contains some of these furocoumarins but the concentration in the sap is far less, leading to irritation rather than deep burns needing hospital treatment.
The result is that many of our native Hogweed plants, upon which many native invertebrates depend, are hacked down because they are mistaken for Giant Hogweed. So is there a way of distinguishing the two species?

It isn't easy to the untrained eye, but here are some pointers:

1 **Inflorescence Size**: A healthy Giant Hogweed can have white flower heads the size of a small umbrella with many smaller flower heads surrounding it. Hogweed tends to have large but flatter dull white flower heads, many with a pinkish tinge.

2 **Stem**: both are bristly but Giant Hogweed tends to have many small purple spots.

Giant Hogweed Stem

Photos: Peter Llewellyn

3 **Leaves**: there is quite a variation in leaf shape of ordinary Hogweed but generally the lobes of the leaves are more rounded. If you find a Hogweed with rounded leaves it isn't Giant Hogweed which has very large and quite pointed leaf lobes.

4 **Plant size**: Healthy Giant Hogweed can easily be as much as 5 metres (over 15 feet) tall and the strongest healthiest ordinary Hogweed can't grow this big - just over 2 metres at most.

If you find a clump of Giant Hogweed can you notify someone in authority so that it is removed?

Logically, considering the danger particularly to children, the answer should be “yes” but it isn’t necessarily. You will have to look at the legislation covering invasive plants in the country where you found the plant.

In the United Kingdom the current (effective in 2020) legislation allows the appropriate minister to take action if s/he is so minded but a few clumps of Giant Hogweed will not elicit a positive response. In fact The Countryside and Wildlife Act 1981 actually forbids us from uprooting wild plants without the permission of the landowner.

The positive side of this is that the landowner owns both the land and the plants growing on it. Unless they are under a special protection order they can be removed with the landowner's permission. If the land is owned by the local authority then they should be contacted. If you don’t know who owns the land or the landowner doesn’t care, then there isn’t anything you or anyone can legally do about it.

We are actually allowed to grow invasive plants in our gardens (example: Garden Yellow Archangel *Lamiastrum galeobdolon* ssp. *argentatum*) but must not allow them to escape into the wild. Similarly there is nothing to stop someone growing Giant Hogweed as a garden plant which is exactly why it was introduced in the first place.

Giant Hogweed is an introduction from the Caucasus where they have similar plants such as *Heracleum lescovii* which have the same irritant sap. You can sometimes find a hillside covered in this species.
So how do the Caucasus locals cope with forests of such dangerous plants? They ignore them and walk straight through the middle if they want to. There is no strimming or removing of these species which are just accepted as part of the natural environment. Contrary to what some people post on social media, there is no irritant effect from just touching or brushing against these plants.


Hogweed Leaf


Giant Hogweed Leaf

Scientists think that the chemicals in the sap which produce these irritant effects in humans are a way of the plant protecting itself against both insect attack and pathogenic or fungal infection. Perhaps we should remember that all species have evolved in such a way that they can survive the various threats they face in their usual habitat. This kind of evolution has happened in other genera including other well-known and useful members of the Apiaceae and many more than you might think (for a list see the WFS website).

Hogweed itself has more positive than negative attributes. It has been used as a herbal treatment for many maladies in the past and has since been investigated by scientists. Modern pharmacological studies have demonstrated that *Heracleum* species and their active compounds have extensive biological activity. They have anticonvulsant, anti-inflammatory, antifungal, anticancer, antipsoriatic, anti-vitiligo and antioxidant activities. They have successfully been utilised to treat psoriasis, as pain killers and as anticonvulsants.

Giant Hogweed is not doing nasty things to us on purpose and Britain isn't its usual habitat. We brought it here to enhance our gardens.

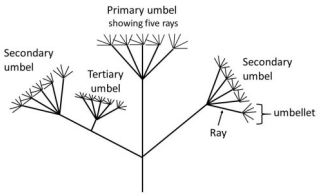
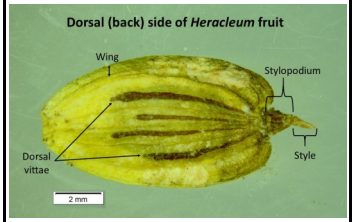
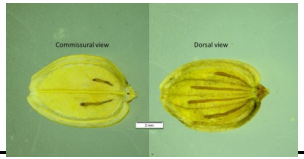
PETER LLEWELLYN

The following is a report from Jay Mackinnon, who received a grant from the WFS to research into the abundance of hybrid Hogweed.

HYBRID HOGWEEDS

Giant Hogweed *Heracleum mantegazzianum* was introduced to Britain as a spectacular garden plant and was first recorded naturalised in 1828. Hybrids with native Hogweed *H. sphondylium* were first recorded in County Dublin in 1951 (Stace, Preston, & Pearman, 2015). When botanists have a 'search image' for it, the hybrid can be found at many sites where the species co-occur (Grace & Stewart, 1978) so the 56 hectads in Britain and Ireland where *H. sphondylium x mantegazzianum* has been recorded are probably a substantial underestimate compared to the (at least) 1223 hectads where both parents occur (Stace et al., 2015). The hybrid is intermediate in size and, as for most *Apiaceae*, fruits are important for identification. These characters are observable from the start of fruiting in July until winter storms scatter last year's fruits, sometimes as late as February/March in sheltered sites. Wear gloves when investigating hogweeds.

Well, that sounds straightforward.. Does it? I'm sorry, I misled you. Like many hybrids, identification of hybrid Hogweed is a little murky. Although there are some clearly intermediate specimens, native Hogweed is so variable that it overlaps considerably

	Common Hogweed	Hybrid Hogweed	Giant Hogweed
Height	1.3 - 2 m	1.5 - 2.6 m	>2 m and usually >3 m
Flowering stem at base	10 - 25 mm diameter	19 - 45 mm diameter	> 35mm diameter with purplish-red spots or blotches
Primary umbel 	14 - 18 cm diameter, 10 - 29 rays. Usually flat-topped but can be concave or slightly domed. 	(16) 20 - 25 cm diameter, 30 - 60 rays. Slightly dome-shaped or more-or-less flat-topped. 	At least 55 cm (usually more) in diameter, 50-120 rays. Dome-shaped and often with lower rays curving downwards. 
Fruit 	6 – 10 mm in length. Dorsal vittae (oil ducts) < 0.4mm wide at widest point. 	9.5 – 11 mm or more in length. Dorsal vittae 0.3 - 0.6 mm wide at widest point. 	9 – 14 mm in length. Dorsal vittae > 0.7 mm wide at widest point. 

Umbel Photos: Jay Mackinnon

Photo: Euan Fraser

Photo: Bailey Brown

Photo: Bailey Brown

in morphology with the hybrid: some may be indistinguishable. If grazed or mown, Giant Hogweed will be shorter and slimmer with fewer inflorescence rays; however, fruits should secure a correct differentiation of Giant and hybrid.

Although the hybrid has limited fertility, backcrossing with native Hogweed is possible so any intermediate genotype might also be present in a population. Additional characteristics of fruit, leaves and stems can also be used to differentiate the three taxa, most of them less easy to observe in the field.

If you look too closely, even the parent species may not be all that clear-cut. After all, if one of the Giant Hogweed species can be introduced as a horticultural showstopper, why not any of them? Historical catalogues and gardeners' notes suggest that this was indeed the case (Armitage, *pers. comm.*) and a study of *Heracleum* taxa in the UK indicates that five are present (Denness, Armitage, & Culham, 2013).

Such is the joy of wild flower identification: it becomes curiouser and curiouser as we delve deeper, from our familiarity with discrete species to the recognition that plants respect no such boundaries. And whether alien taxa enrich, complicate or contaminate our flora is, to some extent, a matter of opinion.

I am grateful to the Wild Flower Society for a grant supporting investigations into the abundance of hybrid Hogweed.

JAY MACKINNON

Denness, A., Armitage, J. D., & Culham, A. (2013). A contribution towards the identification of the Giant Hogweed species (*Heracleum*, *Apiaceae*) naturalised in the British Isles with comments concerning their furanocoumarin content. *New Journal of Botany*, *3*(3), 183–196. https://doi.org/10.1179/2042349713Y.0000000031

Grace, J., & Stewart, F. (1978). Hybridization in the genus *Heracleum* in the British Isles. In *Actes du 2e Symposium international sur les Ombelliferes1* (pp. 773–782).

Stace, C. A., Preston, C. D., & Pearman, D. A. (2015). *Hybrid Flora of the British Isles*. Bristol: Botanical Society of Britain and Ireland.

Can you name the British wild flower? e.g. Shabby bird = Ragged Robin

1) He puts his oar in too often
2) Highlander's yearn
3) Miser's instruction to his offspring!
4) She doesn't live on the hill
5) A commando perhaps?
6) One of the marines
7) Amphibian linen
8) Prudish National Emblem
9) 'They seek him here, they seek him there'
10) Seen by Melchior and his two companions

Answers on page 24

WFS GRANT AWARDS

The previous article on hybrid Hogweeds is just one example of a project that has been supported by a grant from the WFS. Each year we make a number of awards to a wide variety of organisations and individuals to help support our aims of
a) promoting a greater knowledge of field botany among the general public and in particular among young people;
b) advancing education in matters relating to the conservation of wild flowers and the countryside;
c) promoting the conservation of the British flora.

The grants are made particularly to assist with the running of training courses and the issue of publications relating to wild flowers, such as the *Flora of Cornwall* and *Hawkweeds of S.E. England* (see reviews on page 32 - 35). Knowledge of how to identify plants accurately is essential as a basis for their conservation. The grants also support research including the BSBI's Atlas 2020 project, which is updating information on the distribution of wild plants in Britain and Ireland and, in 2019, two projects on the conservation of rare plants, namely Josh Styles' North-West Rare Plants Initiative (reported in WFM Autumn 2019) and Brian Laney's work on conserving Meadow Clary *Salvia pratensis.*

Over the last six years (2015 – 2020) the WFS has provided grants to 36 different wildlife trusts to help them provide training of one sort or another to their members. This may be in wild flower identification, habitat monitoring or the purchasing of books and equipment. In 2020 wildlife trusts have had to be more imaginative in providing their training with several turning to the internet and producing virtual training sessions.

The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire ran their training via Microsoft Teams and made the following comments about their experiences:-

One of the advantages of running the workshops online is that participants are not limited to a particular geographical area and more participants can attend from the comfort and safety of their own homes. The obvious disadvantage is that people do not get to put their newly acquired skills into practice under the watchful eye of the trainer outdoors, or get to socialise with like-minded people.

The online Introduction to Grasses training workshop, held in July with Brian Eversham, attracted an audience of over 100 and we had a similar number for the Meadow Ecology and Conservation workshop held in September. Feedback received has been positive with the only teething problems being around how the workshops are accessed.

Due to their success, the 2021 programme will mostly consist of online workshops with the additional option of attending an outdoor session in a small group(s).

To give you a flavour of the range of courses we have supported I have picked out four examples from the 36.

Norfolk Wildlife Trust – Wildlife in Common

Our common land is a relic of the Middle Ages when many depended on commons to survive. Norfolk has a rich heritage of common land, but its true natural and historic worth is not widely understood. Norfolk Wildlife Trust have just finished the second summer of recording for the 'Wildlife in Common' project. It is equipping community volunteers with new skills to carry out the first comprehensive survey of wildlife and historic features on 60 Norfolk commons and create habitat management statements for each site. As part of the project, volunteers are being trained to carry out botanical and habitat surveys of the commons, as well as being provided with training to survey other taxa. The grant, very kindly provided by the Wild Flower Society, contributed towards the costs of running 12 plant identification courses to aid both beginners and those that required more targeted training to assist with the survey of particular groups of plants. The workshop subject matter was based on responses from project participants when asked, at the project's annual conference in January 'what further training they would like to see provided?'

The project coordinator set up a varied schedule of wild flower/plant identification sessions to be run through last spring and summer (2019) to advance the knowledge of

Photo: Norfolk Wildlife Trust

all the volunteers involved. Local experts were engaged to deliver the sessions, which were facilitated by the project coordinator. All the planned training sessions were run despite, in some cases, the challenging weather conditions. In total 93 people attended the workshops through the spring and summer. The project participants found the workshops useful and took their new skills back to their commons to continue the survey work. The volunteers urged us 'To keep the ID workshops going. They are invaluable and repeating them each year is really helpful.' We would like to offer our sincere gratitude for the grant provided by the Society.

Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust – Develop Your Skills training at Meadow Farm

Meadow Farm is a rich and varied site with an impressive history dating back to medieval times, with meadows having been established since that time and having been untouched by modern farming ever since. The meadows have never been deep ploughed and, as a result, rare wild flowers are thriving, including True Fox-sedge *Carex vulpina* and Tubular Water-dropwort *Oenanthe fistulosa.* Other species indicative of this rare type of floodplain meadow which are found here include Great Burnet *Sanguisorba officinalis,* Meadow Foxtail *Alopecurus pratensis,* Crested Dog's-tail *Cynosurus cristatus* and Knapweed *Centaurea* sp., which together create a spectacular, colourful show throughout the summer months.

In June 2018, BBOWT organised a Wild Flower Meadow Habitat Management course using a grant from the WFS. The course provided BBOWT volunteers with an opportunity to study wild flowers and habitat management on the reserve. BBOWT's Upper Ray reserve warden, Andy Collins, led the in-depth training session. The day began with a theoretical study in order to refresh and improve the group's identification skills. Andy also led the group through some of the wider principles concerning wild flower meadow habitats, including the identification of indicator species and how to assess the health of the habitat, its management and restoration techniques.

During the afternoon, course attendees conducted a rapid site assessment across different areas of Meadow Farm. This presented an important opportunity for them to put their newly acquired skills into practice and reinforce their identification skills. Following the rapid assessment, participants took part in an exercise which looked at how the meadow could best be managed, restored and improved.

Gwent Wildlife Trust – The British, Pontypool

This day was led by Gwent Wildlife Trust's Andy Karran. It was attended by five volunteers and two members of staff. Three of the volunteers are young, budding, future naturalists who are desperate to gain further knowledge in ecology and conservation. The British is a diverse site and, because of its industrial past, habitats vary massively and

throw up some surprises. There are large areas of acid grassland, marsh grassland, dwarf heath on coal tips, but also areas that have indicators of neutral and limestone grassland (due to waste materials from industry); this provided a wide range of species to study. The focus of the day was to identify which species are indicators of habitat type and whether they are positive or negative. This is a skill that is important, especially for those setting out on a career in conservation.

Cumbria Wildlife Trust – Meadow Life

Photo: Cumbria Wildlife Trust

Owned by Cumbria Wildlife Trust, the 3.52ha section of Smardale Nature Reserve stretches from Newbiggin-on-Lune almost as far as Kirkby Stephen. The wonderfully varied site has been designated for its areas of neutral grassland, the most dominant community being National Vegetation Classification (NVC) MG3 *Anthoxanthum odoratum - Geranium sylvaticum* grassland and as a site with many butterfly species of country importance. Smardale Gill is one of the only two sites in England that's home to the Scotch Argus butterfly and there is a range of unusual plants: Melancholy Thistle *Cirsium heterophyllum*, Bird's-eye Primrose *Primula farinosa* and Frog Orchid *Coeloglossum viride* all of which can be seen in the grassland which has colonised the railway cutting and embankments and is managed by grazing in winter.

Funding from The Wild Flower Society supported the provision of a training day for nine Meadow Life volunteers in June 2019. This training provided those attending with the knowledge and skills to help with the monitoring of grassland County Wildlife Sites within Cumbria. The training day gave the volunteers opportunity to learn about the Local Site System in Cumbria and the survey methodology for grassland sites. The day was led by Stuart Hedley, a lifelong field botanist with 30 years' experience of surveying, training and monitoring. Through formal and informal teaching the day also provided a chance for the attendees to update their ID skills on the site visit to Smardale Nature Reserve. A programme of County Wildlife Site monitoring will now be rolled out over the next three years.

And finally, in 2019 we supported the work of Dr Lee Raye and a report on this project follows.

ANNE KELL

THE SPONTANEOUSLY OCCURRING PLANTS OF SCOTLAND (1684) AND ITS REFERENCES TO MENTAL HEALTH

This year I have been lucky enough to be chosen as the recipient of one of the Wild Flower Society's Research Project Grants. My project has been to translate part of *Scotia Illustrata* (1684), a text compiled by Robert Sibbald, who was one of the founders of the Royal Botanic Garden Edinburgh. The part I have been translating is part 2, book 1 and is called *De Plantis Scotia Sponte Nascentibus* (*The Spontaneously Occurring Plants of Scotland* or, as I have been calling it *Wildflowers of Scotland*).

This text is very exciting for a plant enthusiast. It exclusively deals with wild plants (another untranslated part of *Scotia Illustrata* deals with garden plants). Robert Sibbald drew on data provided by at least 65 informants from across Scotland, meaning that the text has the potential to tell us what plants were present in north Britain before the eighteenth-century industrial revolution, the nineteenth-century grouse moors and the twentieth-century intensification of agriculture. I've now finished working through the book for my translation, and I've moved into the very difficult stage of attempting to identify the species from the pre-Linnaean polynomial nomenclature used!

The thing I've been most surprised at during this project, is how very interested *Wildflowers of Scotland* is in the medical uses of the plants it describes. Robert Sibbald seems to have belonged to the seventeenth century philosophy which claimed that local cures were better for local people and that, for every disease that occurred in an area, God had provided a remedy in the same area. He also seems to have had a strong humanitarian streak and the Royal College of Physicians of Edinburgh, which he co-founded along with the Royal Botanic Garden Edinburgh, gave out some medicines to poor people and those experiencing homelessness for free.

One thing which especially struck me while reading was how many remedies there are for mental illnesses and symptoms of poor mental health. Many of these remedies still have cultural resonance to this day, in that the disorders or symptoms described are still relevant and the plants prescribed are still in use, in one way or another. So, for example, there were six different plant genera which are said in *Wildflowers of Scotland* to help with insomnia. One of these is the poppy (native *Papaver* spp.):

> "Poppy flowers cool and induce sleep. They are also useful drunk against pain in the side and spitting blood."

Interestingly there is a long tradition of using Corn Poppies *Papaver rhoeas* for sleep, just like Opium Poppies *Papaver somniferum* were originally used. Similarly, Black

Horehound *Ballota nigra* is recommended as 'a pre-eminent remedy for those affected by hypochondria and hysteria', disorders which might involve, what we call today, anxiety or panic attacks, and modern medical researchers have found this plant is known to have neurosedative properties. Neither plant is likely to be prescribed today, but they may have been effective at the time.

Some plants were also recommended for loss of sex drive, most interestingly perhaps seed of Burdock *Arctium* species. Greater Burdock *Arctium lappa* roots are regularly used as an aphrodisiac today in herbal medicine and has been proven in lab. tests on rats, although I don't know if the seed is still used. Interestingly, there is also an opposite treatment recommended in *Wildflowers of Scotland*: Hawkweed *Hieracium* species is suggested as a remedy to inhibit sexual appetite.

The most interesting mental health reference I found was for melancholy. *Wildflowers of Scotland* gave six remedies for melancholy of which perhaps the one given the most weight was:

> "A tincture of the flower of St John's - wort is an exceptional medicine taken internally in cases of mania and melancholy."

This especially impressed me, because when I took Mental Health First Aid Training with NHS Wales in 2017, the only herbal remedy recommended on the course at that time was St John's-wort *Hypericum* spp. for depression. Despite the lack of openness about mental illness over the intervening centuries, the same plant was preferred for the same symptoms over 300 years ago!

Of course, not all the remedies recommended still make sense today. Four remedies are given for an 'excess of phlegmatic humors'. This was a disorder characterised by apathy, but the treatments recommended, including Beet *Beta* spp., Sea-rocket *Cakile maritima* and Holly *Ilex aquifolium* berries, no longer have any use for treating mental illness. Holly berries are, of course, poisonous. The complex of symptoms described by 'an excess of phlegmatic humors' does not make sense to a modern reader.

Strangely, plants to increase appetite, presumably of use for disordered eating, were the most common of all. Several different plant genera were recommended, including Sorrel *Rumex acetosa*, Beet *Beta* spp., Wild Cherry *Prunus avium*, Rock Samphire *Crithmum maritimum*, Broom *Cytisus* spp. and Elder *Sambucus* spp.. Without treating the cause of the loss of appetite, these would seem unlikely to have worked, unless readers can think of something I am missing.

I am expecting to publish my initial translation of *The Wildflowers of Scotland* next year. I will be issuing it alongside my previously published translation of another part of the original 1684 text; *The Animals of Scotland* (2017).

LEE RAYE

WINTER MONTH'S HUNT 2019 - 2020

Name	County(s)	No. of Sp.	Dec	Jan	Feb
Marilyn Abdulla	Norfolk	**60**	33	35	41
Barbara Allen	Lancashire	**61**	33	0	41
Nick Barber	Gloucs/Oxon	**39**	21	30	27
Enid Barrie	Essex	**95**	55	51	55
Gareth Bursnall	Surrey/Sussex	**127**	64	72	90
Julie Clarke	Lancashire	**72**	41	55	31
Stephen Clarkson	Suffolk	**77**	37	40	37
Everald Ellis	South Yorkshire	**38**	27	1	25
Ben & Tessa Fisher	Essex	**109**	79	70	78
Pat Graham	Cheshire, Co. Durham, Hants	**49**	11	22	46
Anthony & Rita Grainger	Cheshire, Yorks	**79**	42	31	59
Doug Grant & Sue Poyser	Kent	**177**	113	121	121
Anne Hercock	Hants/Mon	**80**	37	61	39
Pippa Hyde	Middex/Surrey/ Sussex	**93**	58	64	67
Anne & Dennis Kell	Suffolk	**160**	114	114	83
Sue Kightley & Diana Stroud	Berkshire	**108**	81	89	90
Sally Maller	Devon/London	**205**	82	65	58
Barbara Mathews	Suffolk	**89**	35	59	75
Daphne Mills	Kent	**177**	137	100	99
Dawn Nelson	Sussex	**296**	163	151	106
Jill Oakley	Sussex	**258**	128	166	143
Janice Reynolds	Sussex	**111**	80	43	63
Mike Robinson	London	**69**	38	12	17
Dorothy Ross	G. Manchester/ Lancs/Mersey	**78**	42	43	52
Eliza Sackett	Somerset	**92**	49	69	52
Heather Silk	Kent	**82**	50	34	48
Mary & Claire Smith	Derbyshire	**114**	77	62	60
Christina White	Northants/Oxon	**61**	45	47	38

Total number of species seen: 572

All saw; Daisy *Bellis perennis*, Shepherd's-purse *Capsella bursa-pastoris*, Groundsel *Senecio vulgaris*, Common Chickweed *Stellaria media*, Dandelion *Taraxacum officinale* agg.

Sole records: 198.

Firstly, a big 'thank you' to Dorothy Ross who has looked after the Winter Months Hunt for several years. I have discovered, since taking over, that this is no small task although an enjoyable one. I started checking through the lists as the Covid19 lockdown began. I looked through a couple of lists each day with the daily press briefing and Government statement on in the background. Keeping up to date with the situation was important to me and having plant lists to look through made the news more palatable.

Seeing everyone's lists has been fascinating and the different ways of recording. A couple of members only recorded the first time they saw a plant over the three months. Others recorded the plant each month it was seen during the hunt. There were 572 different plants seen over the three months by the 28 people who took part, with 198 of these sole records - far too many to mention individually here. A full list is available on the WFS website for those who are interested.

The flooding in late 2019 and early 2020 meant hunting was curtailed for some. Leatherhead, where I live, was affected and was shown on the television news on a couple of occasions. Getting to my favourite hunting grounds was impossible during that time so I had to content myself with watching the waters rise and fall. Plants are tenacious however and things quickly got back to normal as the land dried out. Lists came in spanning different parts of the country although mainly for the south of England and only one for Wales. Some people recorded from several different counties which added interest. It was good to see familiar names and to welcome some new people to the hunt. It was also lovely to hear from Ro FitzGerald who emailed me to say she had started a list but was unable to complete the hunt. She commented on the miserable, cold weather we were having at that time.

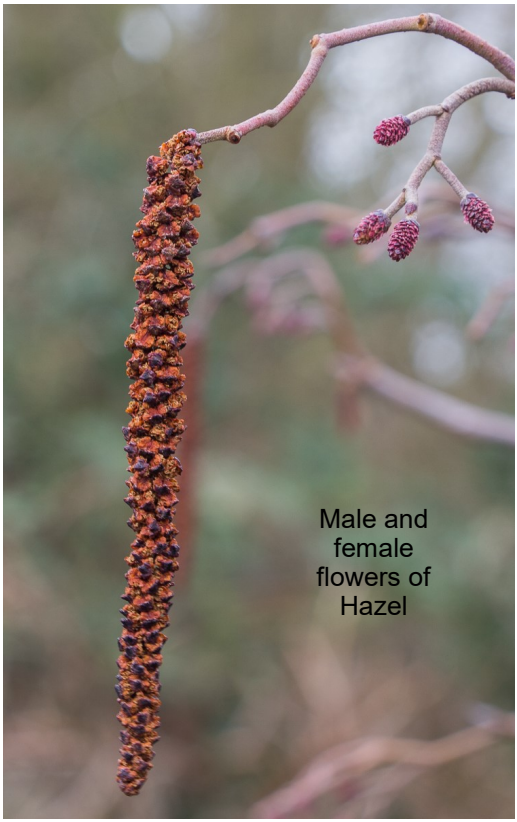
From the more northern counties of England I received lists from the following. Barbara Allen who saw Alexanders *Smyrnium olusatrum* and Narrow-leaved Ragwort *Senecio inaequidens*. The latter seems to being spreading steadily throughout the country now. Julie Clarke sent a good list which included Foxglove *Digitalis purpurea* and Argentine Vervain *Verbena bonariensis*. Everald Ellis found Pale Corydalis *Pseudofumaria alba.* Spurge-laurel *Daphne laureola* was another plant she was pleased to see. Pat Graham was pleased to find Marsh-marigold *Caltha palustris* and Opposite-leaved Golden-saxifrage *Chrysosplenium oppositifolium* whilst out hunting. Anthony and Rita Grainger, whilst recording, found Sulphur Cinquefoil *Potentilla recta* which was a new entry for their main list. Also, a new one for their 10km hunt, was False Oxlip *Primula vulgaris* x *veris* = *P.* x *polyantha*. Dorothy Ross enjoyed her newfound freedom from WMH list checking and saw all four Butterbur *Petasites* species as well as three different Dead-nettles *Lamium*. Mary and Claire Smith sent me a very neat and clear list. They found Harebell *Campanula rotundifolia* and were also pleased to find Blinks *Montia fontana*.

Anne Hercock was the only person who sent a list which had some entries from Monmouthshire in Wales. She was particularly pleased to find Prostrate Rock-cress *Arabis procurrens* with Wood Anemone *Anemone nemorosa,* which was another good find.

East Anglia provided five lists for the hunt. Marilyn Abdulla found Cross-leaved Heath *Erica tetralix* and, the ever-cheerful, Winter Aconite *Eranthis hyemalis.* Enid Barrie, despite recording in Essex, brought a touch of the Channel Islands to the hunt with Jersey Cudweed *Laphangium luteoalbum*, which she said is extremely abundant between block paving, as is Guernsey Fleabane *Erigeron sumatrensis*. Stephen Clarkson spotted the unusual Fern-leaved Corydalis *Corydalis cheilanthifolia* and found flowering Springbeauty *Claytonia perfoliata*. Anne Kell took a break from magazine editing and along with Dennis sent me a good list. Amongst the records made were Sicilian Chamomile *Anthemis punctata* and Abraham-Isaac-Jacob *Trachystemon orientalis*. Barbara Mathews found three different Comfreys for her list, Rough *Symphytum asperum*, Creeping *S. grandiflorum* and White *S. orientale*.

The southern counties provided the rest of the lists I received. Nick Barber sent an interesting list that included Green Hellebore *Helleborus viridis* and Autumn Hawkbit *Scorzoneroides autumnalis*. Gareth Bursnall was pleased to find Borage *Borago officinalis* and Musk Stork's-bill *Erodium moschatum* along with many other good plants. Ben and Tessa Fisher saw Rue-leaved Saxifrage *Saxifraga tridactylites* and enjoyed trying to sort out the different *Crocus* species they found. Doug Grant and Sue Poyser went out hunting together and saw the small but lovely Moschatel *Adoxa moschatellina* and larger, but equally lovely, Cuckooflower *Cardamine pratensis.* I found Lenten-rose *Helleborus orientalis* and Field Scabious *Knautia arvensis* within five minutes of home which I had not seen before during the hunt. Sue Kightley and Diana Stroud found three new ones for their WMH list, Greater Celandine *Chelidonium majus*, Greater Stitchwort *Stellaria holostea* and Honesty *Lunaria annua*. Sally Maller had a holiday in New Zealand in February seeing some superb plants there. During the WMH she found Quaking-grass *Briza media* in flower and recorded both male catkins and female flowers of Hazel *Corylus avellana*. Daphne Mills was pleased that a leap year gave an extra day for hunting and recorded

Photo: Dennis Kell



Male and female flowers of Hazel

Photo: Dennis Kell

Bush Vetch *Vicia sepium* and Germander Speedwell *Veronica chamaedrys* on the 29th February. Dawn Nelson sent me a superb and detailed list. This included five species of *Asplenium* and ten different species of *Crocus*. Jill Oakley went out hunting a lot with Dawn Nelson and Sue Denness. From her list I liked the record for Box *Buxus sempervirens* and was interested to see Coriander *Coriandrum sativum* had been found in flower. Janice Reynolds hunted within an eight-mile radius of her home and commented on the displays of Snowdrops she saw. Her list included two species of these, Common *Galanthus nivalis* and Greater *G. elwesii*. Mike Robinson did his hunting in London with Sea Aster *Tripolium pannonicum* spotted by the River Thames. Pink-headed Persicaria *Persicaria capitata* was another good find. Eliza Sackett's list was interesting and included, amongst other good plants, Fennel *Foeniculum vulgare* and Himalayan Honeysuckle *Leycesteria formosa.* Heather Silk spied Yellow-flowered Strawberry *Potentilla indica* whilst out hunting and Garlic Mustard *Alliaria petiolata.* Christina White told me she was amazed at the persistence and spread of Red Deadnettle *Lamium purpureum*, Shepherd's-purse *Capsella bursa-pastoris* and Groundsel *Senecio vulgaris,* all of which never stopped flowering throughout the hunt.

I am writing this report in June with blazing blue sky outside and the winter feels a long time ago. I have enjoyed my first stint of checking lists for the hunt as much as taking part in it. I shall look forward to receiving lists again in 2021.

PIPPA HYDE

Answers to 'Name the British Wild Flower'.

1) Medlar	2) Scot's Pine
3) Marigold	4) Lily-of-the-Valley
5) Gallant-soldier	6) Water-soldier
7) Toadflax	8) Primrose
9) Scarlet Pimpernel	10) Star-of-Bethlehem

SPRING WEEK HUNT 2020

		Total
Barbara Allen	Merseyside	65
Helen Ayres	East Kent	83
Caroline Bateman	South Devon	88
Sarah Beetham	Bristol area	49
Julie Clarke	Lancashire	44
Steve Clarkson	Norfolk / Suffolk	77
Rita & Anthony Grainger	Leeds	63
Anne Hercock	Monmouthshire	40
Pippa Hyde	Surrey	77
Sue Kightly & Diana Stroud	Berkshire	72
Sally Maller	South Devon	47
Barbara Matthews	Suffolk	55
Ron Parker	Surrey / E. London	59
Sue Poyser & Doug Grant	Kent	114
Janice Reynolds	East Sussex	52
Mike Robinson	London	54
Clare Savage	Stroud, Glos.	10
John Swindells	London	94
Christina White	Northamptonshire	35
Pauline & Richard Wilson	Bristol area	37

Total number of different species seen	148
Only found by one person	104
Species new to Spring Hunt:	19

Having co-ordinated the Spring Hunt now for three years we are beginning to see a trend in what people are finding over the week and where. This year there were eight more plants seen by almost everyone than last year. Does this reflect the mild, if very wet, winter? In our searches both during the week and later in March, we noticed two plants in much greater quantities than usual - Sweet Violet *Viola odorata* and Moschatel *Adoxa mochatellina.* Several people commented on the profusion of Sweet Violets.

With so many records over nearly 100 years and unexpected spare time due to lockdown, we plan to take the commonest plants found now and see if we can find any long term trends. So, a few notes on this year's findings,

Barbara Allen found many more flowers this year and braved the mud to search. She was the only person to see Scented Mayweed *Matricaria chamomilla* and Pineapple-weed *M. discoidea*. Only two people found Fool's Parsley *Aethusa cynapium* and Field Woodrush *Luzula campestris*.

Helen reported the only finding of Bluebell *Hyacinthoides non-scripta,* Parsley-piert *Aphanes arvensis* and English Elm *Ulmus procera.* Only one other person reported Ash *Fraxinus excelsior,* Wood Spurge *Euphorbia amygdaloides* and Alternate-leaved Golden-saxifrage *Chrysosplenium alternifolium.*

Caroline was on holiday in Devon and found an impressive list of plants, with many sole finds, probably reflecting the milder climate. Examples include Wild Garlic *Allium ursinum,* Navelwort *Umbilicus rupestris* and Great Horsetail *Equisetum telmateia.* Three-nerved Sandwort *Moehringia trinervia* was only found by one other person.

Sarah had a good search around the North Bristol area and was the only person to find Field Pansy *Viola arvensis.* Only two people found Ground Ivy *Glechoma hederacea.*

Julie struggled with a cold but found a good number of plants around the local area. She is familiar with a new plant for the list, Celandine Saxifrage *Saxifraga cymbalaria,* but had never seen it flower so early. White Butterbur *Petasites albus* and Ivy-leaved Speedwell *Veronica hederifolia* ssp. *lucorum* were other sole finds.

Steve found several plants new to the list including Perennial Wall-rocket *Diplotaxis tenuifolia* and Hairy-brome *Bromopsis ramosa.* He was alone in seeing Meadow Buttercup *Ranunculus acris,* Wall Lettuce *Mycelis muralis* and Procumbent Pearlwort *Sagina procumbens.*

Rita and Anthony were thrilled to find Sulphur Cinquefoil *Potentilla recta,* just one plant. They also found Alternate-leaved Golden-saxifrage *Chrysosplenium alternifolium*, always pleasing to discover. They were alone in finding Butterbur *Petasites hybridus* and Giant Butterbur *P. japonicus.*

Anne was very pleased to find a new plant, Spreading Rockcress *Arabis procurrens,* which she had verified. Finding Western Gorse *Ulex gallii* and Bilberry *Vaccinium myrtillus* reflects the local soils of Monmouthshire.

Pippa was the only person to report Red Clover *Trifolium pratense,* Hedgerow Crane's-bill *Geranium pyrenaicum* and Black Medick *Medicago lupulina* all flowering really early.

Sue and Diana shared finding a new grass Hairy-brome *Bromopsis ramosa*. A sole find was Gallant-soldier *Galinsoga parviflora.* Only two people managed to find Mistletoe *Viscum album*, difficult to see anyway unless it grows low enough down.

Sally found several early flowering plants including Rough Chervil *Chaerophyllum temulum,* Yellow Archangel *Lamiastrum galeobdolon,* Broad-leaved Dock *Rumex obtusifolius* and Common Scurvygrass *Cochlearia officinalis.*

Barbara Matthews found Common Fiddleneck *Amsinckia micrantha,* Sicilian Chamomile, *Anthemis punctata* ssp. *cupaniana* and Wall Speedwell *Veronica arvensis*. One

other person found Pellitory-of-the-wall *Parietaria judaica.*

Ron found a number of plants not seen by others including Curled Dock *Rumex crispus*, Hybrid Bluebell *Hyacinthoides x massartiana,* Osier *Salix viminalis* and Water Bent *Polypogon viridis.* Bladder Campion *Silene vulgaris* was found by two people.

Sue and Doug found Pheasant's-eye *Adonis annua*, a new plant for the list, and also, surprisingly, Yellow-wort *Blackstonia perfoliata*. A sole grass was Meadow Foxtail *Alopecurus pratensis.* A number of other plants were only found by two people including Field Scabious *Knautia arvensis*, Cat's-ear *Hypochaeris radicata* and Early Forget-me-not *Myosotis ramosissima.*

Janice found a new plant for the list, obviously escaped, Garden Candytuft *Iberis umbellata* and sole finds were Cut-leaved Crane's-bill *Geranium dissectum* and Rock Crane's-bill *G. macrorrhizum.* Only two people found Mediterranean Spurge *Euphorbia characias* ssp. *characias.*

Sicilian Chamomile

Photo: Dennis Kell

Mike hunted over several days observing plants, birds and insects. He was one of two people to record Common Fumitory *Fumaria officinalis* and Small-flowered Crane's-bill *Geranium pusillum*. He was very pleased to see Ivy-leaved Speedwell *Veronica hederifolia*, a herald of spring with its tiny flowers.

Clare sent her first list, beautifully annotated with grid references. She was only one of two to find Wych Elm *Ulmus glabra* in flower.

John recorded a long list of plants not found by others. Bloody Crane's-bill *Geranium sanguineum* and White Stonecrop *Sedum album* are new to the list. Out of the others, mention of a few, Shaggy-soldier *Galinsoga quadriradiata,* Grey Field-speedwell *Veronica polita*, Round-leaved Crane's-bill *G. rotundifolia* and Common Knapweed *Centaurea nigra.*

Christina has also done the spring hunt for the first time and found most of the expected flowers. Black Nightshade *Solanum nigrum,* Nipplewort *Lapsana communis* and Red Valerian *Centranthus ruber* are nice finds.

Richard and Pauline found most of the expected things around our area. Once again we found American Winter-cress *Barbarea verna,* which keeps popping up along our main road. We were surprised by the amount of Moschatel *Adoxa moschatellina* we kept finding in the local woods, more than ever before.

RICHARD AND PAULINE WILSON

SPRING ONE DAY HUNT
WYMONDHAM - 8th MARCH 2020

Winter has been a bit unusual this year. No snow, no real frost, just plenty of rain and almost continual gusty, gale-force winds. In consequence it was good to have a bright, sunny, albeit still windy day to welcome the group to Wymondham, one of Norfolk's most historic towns. Set in the River Tiffey valley, the twin towers of its medieval abbey dominate the local skyline. We should see them closer up later in the day.

Dick and Ali Foyster had travelled down from Shetland for the week and came out to join the rest of the throng. We made slow progress along the weedy sides of the opening drive. Carol explained the features of New Zealand Bitter-cress *Cardamine corymbosa* while Stephen Clarkson did his mini-workshop bit, contrasting the Speedwell species on show.

There always seems much to see in the lokes and lanes of the town and our list grew accordingly. Yellow Monkswort *Nonea lutea* in full flower was a new species for some, as well as Field Marigold *Calendula arvensis* giving us a fine display. Descent of a wet, woody wynd brought us to Toll's Meadow, a local nature reserve. In season it boasts a good floral range, with Orchids, Meadowsweet *Filipendula ulmaria*, Ragged-Robin *Silene flos-cuculi* and the like which, in turn, attract a diverse insect populace and many bird species during the summer months. Today, a female kestrel *Falco tinnunculus* entertained us as we took lunch. A thriving colony of Moschatel *Adoxa moscatellina* was searched diligently but its flowers stayed shy. Not so Cornelian-cherry *Cornus mas* sparkling in the sunshine on rough ground. Daffodils were everywhere. It really is quite surprising how many find their way to quite remote locations and today was no exception, our star find among them was flowering Tenby Daffodil *Narcissus obvallaris*. Further on much photography accompanied the discovery of a glittering array of Barren Strawberry *Potentilla sterilis* interspersed with nodding Sweet Violets *Viola odorata*.

Photo: Dennis Kell

Our last port of call was the Abbey, where Cow Parsley *Anthriscus sylvestris* and Fool's Parsley *Aethusa cynapium* set the scene. The walls were festooned with Wallflower *Erysimum cheiri*, not yet in bloom, much Common Whitlowgrass *Erophila verna* and the remnants of Fern-grass *Catapodium rigidum*, with Buttercups and Daisies completing the scene. With 78 plants recorded, a great day was had by all and a replete group headed back to our house for tea and cakes.

CAROL HAWKINS

SPRING HUNT THROUGH THE YEARS

We took over co-ordinating the Spring Hunt in 2018 and a carrier bag full of past records and reports came to us. We are very keen to see more use made of 100 years of records which led to us reading through the paperwork starting in 1920.
From those early years a few things stand out.

One plant, *Veronica persica*, had changed its name from *V. buxbaumii* and people either didn't know or forgot. For several years there was nearly always a comment about peoples' inability to get it right. I thought there would be shock horror if they had to cope with the rapidity of name changes taking place now!

Then there were the boxes; obviously a source of some intense feelings.
I should explain that initially the Spring Hunt was a competition taking place on 1st March and all flowers had to be sent to the secretary. In 1920 72 boxes were received. The postman asked if it was her birthday! Together the number of plants to be checked was over 1000, quite some feat. Also, you can imagine the state of plants which were received late, on March 9th in one year. The boxes also had to be returned and the postage seemed to cost 6d (2½p). I assume they were metal vasculums, which I dimly remember using at school, but this was not mentioned. One secretary questioned the need for everyone to send a Dandelion or Daisy.

As it was a competition there were prizes: 5/- (25 pence) for adults, which had to be divided one year because 2 people had equal numbers.

Early on, a secretary decided that juniors should have their own competition so they didn't have to compete with adults. Their prize was 2/6d (12.5 pence).

In 1950 the rules changed to the format we have today, counting flowers during the whole first week in March. In 1967 sending of all specimens stopped. Partly this was because of the state of some of the tins. Also the post lady had to cycle 2 miles carrying them all. If there was any doubt in identifying specimens they were to be sent in a polythene bag. Members were very appreciative of the new arrangements.

In 1966 the secretary made a large chart of flowers found by region and it was displayed at the Annual Tea Party. More people were requested to take part, especially living in the East Midlands and Scotland. This is still pertinent today. The chart was used for another 10 years and is a work of art. It also attempted to identify plants found at above 700ft. Members were encouraged to note the distance of plants found from the sea in maritime areas.

One secretary questioned why March 1st was chosen rather than 21st, the first day of spring.

In 1969 an interesting scenario arose - the category of 'weeds in greenhouses'. I think this meant bringing buds into the greenhouse to hasten their opening by 7th March. Is that cheating? I don't know what resulted.

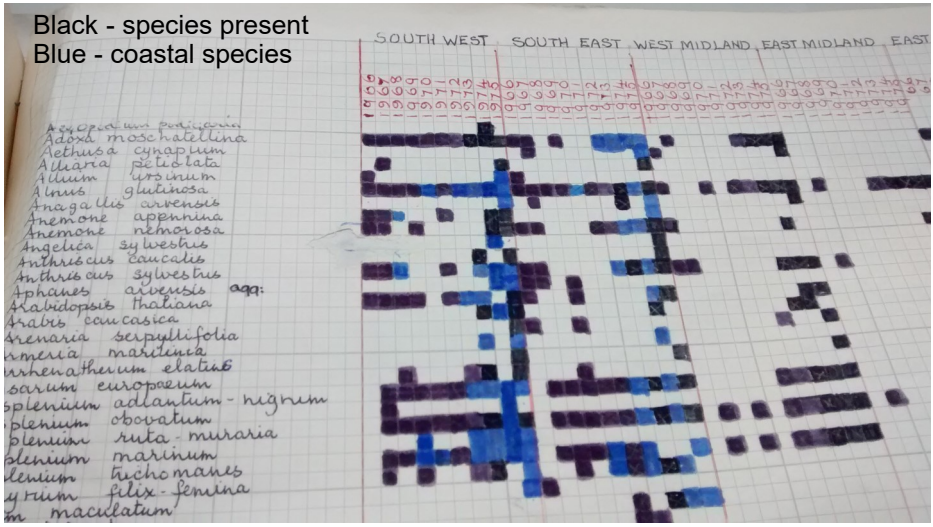
Secretaries changed several times from 1975, but the recordings were well organised and continued to be divided into regions. This system enables a more scientific analysis to be undertaken to see how much climate, altitude and weather affects flowering times.

Using WFS Spring Hunt records some phenology work was done by a Postgrad. student in 2006/7. It was very scientific but seems not to have been completed or published. He took a range of plants, not the commonest 30-40 and not the rarest, and looked in particular at the weather during January and February to see how it affected flowering times in March. His conclusions indicated a correlation between temperatures in the early days of reporting and, more recently, relating to significant increases in the numbers of flowers found. He also, not surprisingly, found that annuals responded more to weather than perennials.

We hope that some further work will be done on the Phenology but it depends on finding the right person and gathering all the relevant information together. For the moment we thought it might be interesting for newer members to hear how flower hunting methods have changed over the years and how frustrations of the 1920's have changed into other frustrations in the 21st century. Maybe in the case of nomenclature, they haven't changed at all!

PAULINE AND RICHARD WILSON

Part of the chart produced in the 1960s and 70s showing the plants found on the Spring Week Hunt.



BOTANICAL LATIN QUIZ NUMBER 3 – PEOPLE

Below are listed the names of people who have had plants named after them. e.g. Aubretia was named after Claude Aubriet (1665 – 1742). Can you work out the genus from the person's name or title?
Note some genera use old names and some are garden plants.

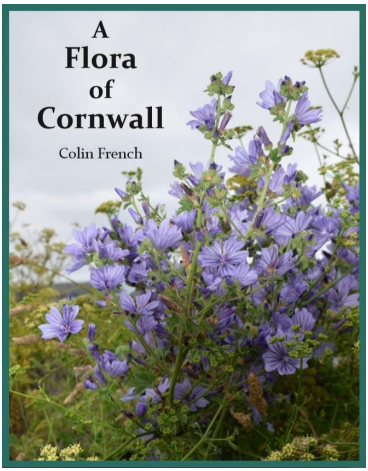
Bartolini Baldelli
Johann Bartsch
Michel Begon
John Blackstone
Louis Antoine de Bougainville
Adam Buddle
John Clayton
Etienne Danthoine
M. H. Deschamps
Francois Descourain
J. B. H. Desmazieres
A. N. Duchesne
Antonio Escallon
Eupator
William Forsyth
John Frankenius
F.H. T. Freese
Leonard Fuchs
Thomas Gage
Dr. Jean Francois Gaultier
Theodore of Gaza
John Goodyer
Johannes Groenland
J. E. Gunner
C. C. L Hirschfeld
G. A. Honckeny
Peter Hotton
Miss Ellen Hutchins
Peter Kalm
J.J. Kickx
Christian Knaut
J. G. Konig
Lavater brothers
J. D. Leers
William Leycester
Dr. M. Lister
M. de l'Obel
Adam Lonitzer
Pierre Magnol
B. M. Mahon
A. G.. Matthioli
F. C. Mertens
Juan Minuart
P. H. G. Moench
A. F. E. C. de Montbret
Nicander
Tommaso Parentucelli
King Polemon
Dr. M. Sarrazin
H. B. de Saussure
H. W. Sibthorp
W. T. H. F. Strangways
Robert Teesdale
Thomas Tofield
Dr. W. F. Tolmie
G. Wahlenberg
J. F. Wolff
William Kerr

ANSWERS ON PAGE 36

GARETH BURSNALL

BOOK REVIEWS

French, C.N. (2020). *A Flora of Cornwall.* Wheal Seton Press, Camborne. ISBN 978-0-95346-133-2. £49.99



This is a hugely important new flora and many members will already know, or know of, some of the people involved in its production. Colin French himself has long been a central figure in Cornwall plant recording since being drawn into the computerising of records using the ERICA database (which was originally initiated in 1987). He has therefore had a long-lasting and detailed overview of every species (and subspecies!) found in the 'two' vice-counties – VC1a West Cornwall, VC1b Scilly and VC2 East Cornwall. Other well-known botanists involved in this massive compilation are too many to mention, but they include Ian Bennallick and Rosemary Parslow who won the WFS President's Award in 2018 for their *New Flora of the Isles of Scilly*.

I think Cornwall must be one of the counties of England highest in public consciousness. From Arthurian legend to Poldark, from Bronze Age trade routes to thrilling stretches of the modern Coast Path, from the Newlyn school of post-impressionist painting to Tate Modern at St Ives, from life boats, lighthouses and Tall Ships to some of the most exotic sub-tropical gardens in the UK – there is something for every interest. For botanists the choice of Meccas is generous and this book gives full attention to all the famous ones and others less well-known but well worth getting to know.

It's a massive book, not one for the pocket or even for the rucksack, but specially now that we are likely to have more 'staycations' than trips abroad, it will help plan botanical holidays with great precision as Colin gives each area a fascinating overview. The style for 21C county floras is for large volumes with admirably thorough introductory sections on the geography, climate, habitats, land-use and history as well as highlighting the key plants. I'm lucky enough to own those for Devon and Sussex, for example, and in both cases felt newly enlightened about counties where I had worked, which I loved and felt I knew. In the case of Cornwall I believed I was really familiar with its places and treasures, having visited, botanised and done Rare Plant Surveys there for more than 40 years, and having dear friends scattered from Saltash to West Penwith, but Colin's book showed me at once how superficial my 'detailed knowledge' really is!

His examination and explanation of subjects such as the 'Extractive Industries', notably quarrying (what I really didn't know about the Lizard serpentine exploitation); the china clay industry (the raising and declining of the 'Cornish Alps'); and

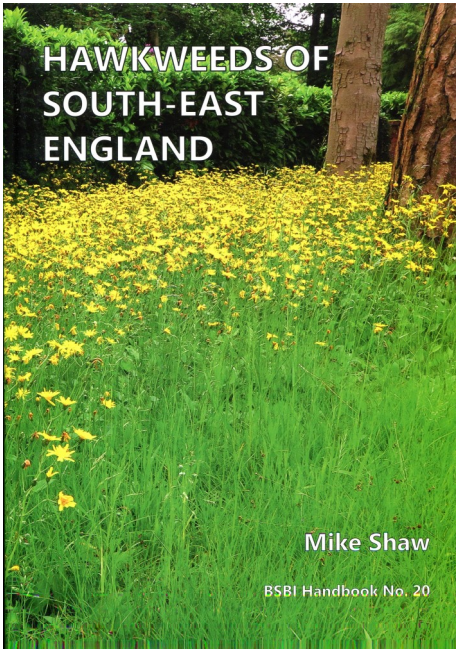
metal streaming and mining (what raised all the dramatic buildings still seen framing spectacular views) is masterly and deeply fascinating. When time became pressing for this review I could hardly drag myself further into the book to look at the generous sections on habitats and the botanical regions. The introductory sections also include some quite specialist subjects which will appeal to more readers than the general botanist – the section on mapping for instance includes explanations of 'axiophytes' and Ellenberg values, both very educational for me! The story of the ERICA database, and more, will interest readers involved with the technicalities and methods of plant recording as well as those who just want to see the plants. I was pleased to find a section on Cornish plant names, by Loveday Jenkin, and one on Disseminules (drift seeds) by Paul Gainey. In 2000 Charles Nelson's BSBI Handbook on these treasures of the Atlantic shores *Sea Beans and Nickar Nuts* had raised a passionate desire in me to *find one for myself.* I never have, but this new note, with good photographs, has fired enthusiasm again.

Finally, in spite of the compelling interests found in the first 75 pages I must comment on the species entries and of course they too please me. The record dots are superimposed on coloured maps of the county geology. They are small but clear even to my less-than-brilliant eyesight and the chosen dot colours work fine on the geology template. Common plants have a fairly brief entry (about 4 to a page). As I write I've opened a chance sedge page, where Remote Sedge *Carex remota*, which is widespread, has a map and photograph, a small box with record date classes, and a note on its habitats – nothing more is needed. Scarcer species may have localities mentioned and significant records and recorders. Really rare plants have much more space allowed – a great favourite of mine, always a big challenge to find, is Cornish or Vigur's Eyebright *Euphrasia vigursii.* This has a whole page, honouring its endemic status, with lovely close-up photos of its stunning purple colour, and a most tempting extra map, at a larger scale than the usual dots-on-geology one, of its main area of distribution. As this is on a North West section of the coast, between Perranporth and Godrevy Head, I instantly start planning a walk to find it again!

As a conservation worker who has mostly been concerned with threatened and declining plants, I would have liked more discussion of specific declines in this important county. Colin writes with moving passion acknowledging the harm which we, humans alive now, are doing to biodiversity and plants in particular, and he describes the major reasons for decline, but it takes searching and some extrapolation by the reader to apply these problems to particular species other than the super-rare which are covered in more detail. However this is a personal wish of mine, and except for that I can only say how I admire this book, how I will enjoy using it, and how I hope that many members will get a chance to do the same!

RO FITZGERALD

Mike Shaw, *Hawkweeds of South-East England.* 2020. BSBI Handbook No. 20. Hardback £35. ISBN 978-0-901158-57-4



Many (most ?) of us are wary of apomicts – Whitebeams, Brambles, Dandelions, Hawkweeds… If you are not prepared to become a serious genus nerd they seem too enormously difficult to identify. Few groups have comprehensive up to date guides and trying to access what literature there is and struggle with descriptions can put a real blight on botanical finds which should be a pleasure.

In the early 1980s I boldly joined a BSBI Hawkweed Group and became fascinated by these lovely plants. We had marvellous adventures in remote Scottish glens, spending evenings in sometimes peculiar lodgings getting our plants carefully into presses.

Hawkweeds are often extremely rare with tiny populations in few localities, but collecting samples for research is ethical because if you carefully cut a plant off immediately above the root it will grow again the next year, and whole plants are needed for identification as leaf characters vary according to their position on the plant. It was all gripping, but also very frustrating because there was so little agreement on what things actually were - most of what I saw could never go into my WFS Diary because names were unavailable. Even the wonderful line drawings done by Olga Stewart, herself a great Hawkweed enthusiast, didn't answer enough questions. (A long-term prominent member of the Society, it is so good that her son Nick in his current role as charophyte and aquatic expert helps so many of our members with these difficult groups!)

So I drifted away from Hawkweeds to concentrate on more general botany. When Sell & Murrell's *Flora* came out (Hawkweeds are in Vol. 4, 2006) keys and descriptions of all British species became available, but after one struggle with a borrowed copy I was so defeated by the massive weight and impenetrability of the data and the vast keys that I decided I couldn't summon the effort and brain power needed. More recently interest in my home VC5 has been activated by Graham Lavender (who is equally brave about Dandelions and Brambles!), and efforts have been made to add dots to maps and refind old records. The problem remains the

same though – how can they be reliably identified?

Help began to appear in the Summer issue of this very magazine, with Mike Shaw's excellent pull-out '*An Introduction to Hawkweed Identification*'. At least we all now know that a good lens or microscope is a basic need for tackling this genus, and we know the essential parts of the plant to examine, and how these details (hairs, glands etc) may differ. This is a big step forward, but most of us still lack references to take us further. Now members in SE England (Kent, Surrey, Sussex, Hampshire, Isle of Wight) have this splendid book. Authoritative regional guides are exactly what are needed – thorough, well-illustrated, describing Hawkweeds in places and habitats which are familiar. This is a lovely book – illustrated with photographs of live plants, herbarium specimens, and really revealing magnified images of diagnostic details. Geoffrey Kitchener (Branch A Secretary) has written an approving review in *BSBI News* calling the species accounts 'generous' and noting the 'perceptive comments on separation' of similar species - I completely agree. It's a substantial book – not for field use – but will be superbly helpful for homework.

Those of us in other parts of Britain and Ireland have some useful books – *Yorkshire Hawkweeds* (Jones 2004) is probably well used by northern members, and there are two BSBI handbooks *British Northern Hawkweeds* (Rich & Scott 2011) and *British Alpine Hawkweeds* (Tennant & Rich 2008), but I think Mike Shaw's book is more lavish in its treatment of the SE plants, and of course it can be used to identify some nationally widespread species. My one word of warning concerns these, because Hawkweeds have suffered many name changes over time and some of the common ones now have unfamiliar modern names. Someone like me who has not followed these changes really needs to be given the synonyms used in earlier sources. These are not given, so on a few occasions people using this book need to be prepared to poke around in synonym territory. I believe Sell & Murrell would reveal, or the 'Kew List' on-line can be useful.

However, the book is a splendid achievement and I hope it will draw new fans to this fascinating genus, as well as working wonderfully for those who already love the genus *Hieracium.* The sometimes-tiny populations in special habitats such as walls, rock outcrops and bridges, are often very vulnerable so their correct recording is important and the more botanists who can do this the better. If many more of us could identify the species most close to home and make sure their VC Recorder knows of them, this could save many treasures.

RO FITZGERALD

BOTANICAL LATIN QUIZ NUMBER 3 – PEOPLE
ANSWERS

Bartolini Baldelli	Baldellia	J.J. Kickx	Kickxia
Johann Bartsch	Bartsia	Christian Knaut	Knautia
Michel Begon	Begonia	J. G. Konig	Koenigia
John Blackstone	Blackstonia	Lavater	Lavatera
Louis Antoine de Bougainville	Bougainvillea	J. D. Leers	Leersia
Adam Buddle	Buddleja	William Leycester	Leycesteria
John Clayton	Claytonia	Dr. M. Lister	Listera
Etienne Danthoine	Danthonia	M. de l'Obel	Lobelia
M. H. Deschamps	Deschampsia	Adam Lonitzer	Lonicera
Francois Descourain	Descurainia	Pierre Magnol	Magnolia
J. B. H. Desmazieres	Desmazeria	B. M. Mahon	Mahonia
A. N. Duchesne	Duchesnea	A. G.. Matthioli	Matthiola
Antonio Escallon	Escallonia	F. C. Mertens	Mertensia
Eupator	Eupatorium	Juan Minuart	Minuartia
William Forsyth	Forsythia	P. H. G. Moench	Moenchia
John Frankenius	Frankenia	A. F. E. C. de Montbret	Montbretia
F.H. T. Freese	Freesia	Nicander	Nicandra
Leonard Fuchs	Fuchsia	Tommaso Parentucelli	Parentucellia
Thomas Gage	Gagea	King Polemon	Polemonium
Dr. John Francois Gaultier	Gaultheria	Dr. M. Sarrazin	Sarracenia
Theodore of Gaza	Gazania	H. B. de Saussure	Saussurea
John Goodyer	Goodyera	H. W. Sibthorpe	Sibthorpia
Johannes Groenland	Groenlandia	W. T. H. F. Strangways	Stranvaesia
J. E. Gunner	Gunnera	Robert Teesdale	Teesdalia
C. C. L Hirschfeld	Hirschfeldia	Thomas Tofield	Tofieldia
G. A. Honckeny	Honckenya	Dr. W. F. Tolmie	Tolmiea
Peter Hotton	Hottonia	G. Wahlenberg	Wahlenbergia
Miss Ellen Hutchins	Hutchinsia	J. F. Wolff	Wolffia
Peter Kalm	Kalmia	William Kerr	Kerria