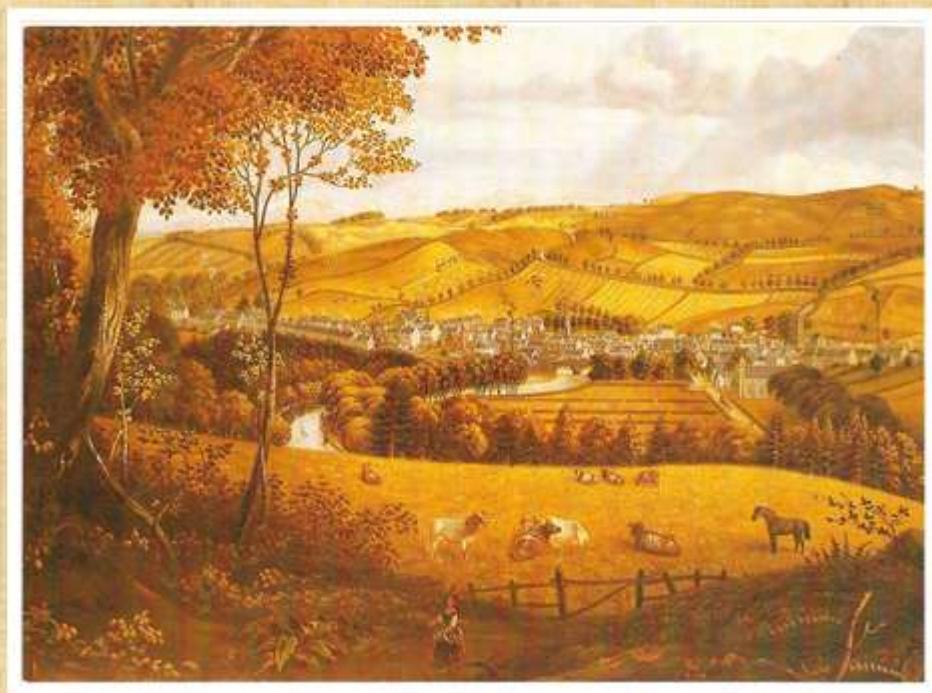


*The flora
of
Hawick Burgh*



The flora
of
Hawick Burgh

The flora of Hawick Burgh



Hawick Archaeological Society

2015

www.airchieoliver.co.uk

© Hawick Archaeological Society
Charity Number SC016405

Maps © Crown copyright 2014 Ordnance Survey licence number 100054772

ISBN 978-0-9518647-7-7

Printing sourced by Core³ Partners Ltd, Hawick, TD9 7EB

The flora
of
Hawick Burgh

Michael E Braithwaite

Acknowledgements

The author acknowledges with gratitude the tolerance shown by the townsfolk of Hawick during his botanising rambles and scrambles into unlikely corners around the town, with no more than the occasional aside on learning of his quest: ‘ee’ll no finnd ony flooers there’.

Thanks are recorded to Derrick Moore for permission to reproduce some of his fine photographs, to Jake Coltman for making available some of his collection of old postcards and to Scottish Borders Council Museum & Gallery Service for permission to reproduce the painting *Hawick from Wil ton* by J B Pringle, c 1854. Further photographs are from the author’s own collection.

The author

Michael Braithwaite was born in Northumberland. He came to work in Hawick as a chartered accountant in 1969, just after the Waverley Line was closed. He took up the study of wild flowers as a hobby and made the flora of the old railway his first project. *A Railway Flora of Teviotdale* was published in 1975. He was soon to be appointed vice-county recorder for Berwickshire for the Botanical Society of Britain and Ireland (BSBI) and recorded in that area for thirty-five years before publishing *A short Flora of Berwickshire* in 2014. The completion of that work has allowed him to turn his attention once again to his home area.

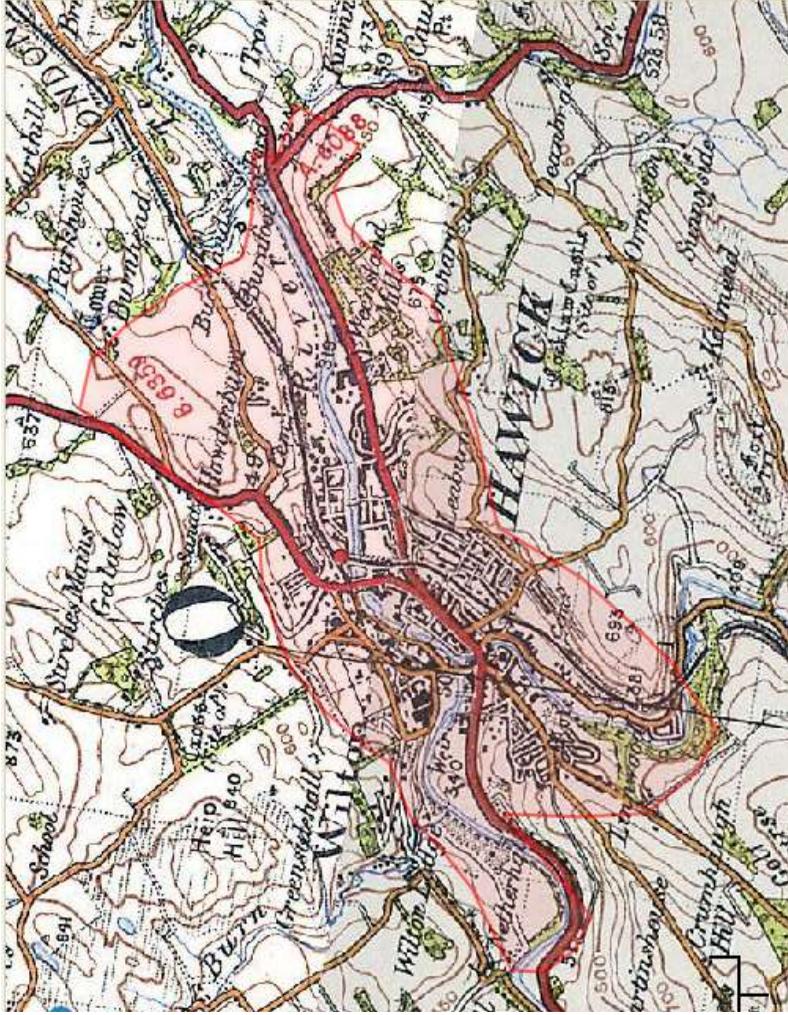
BSBI

The Botanical Society of Britain and Ireland has been the major inspiration for the author’s botanical work. It is the leading charitable society promoting the study and enjoyment of British and Irish wild plants, including the publication of local Floras. More information will be found on the BSBI website at www.bsbi.org.uk

Clarilaw Farmhouse
Hawick
TD9 8PT

CONTENTS

| | Page |
|---|-----------|
| BACKGROUND TO THE FLORA | |
| 1. Introduction | 6 |
| <i>Map - The 2014 survey - Species selection - Species summary - Species-richness - The concept behind the habitat descriptions</i> | |
| 2. Geology and history | 12 |
| <i>Geology - History - Historical botanical records - References</i> | |
| THE HABITATS AND THEIR FLORA | |
| 3. Woodland | 17 |
| <i>Whitlaw Wood and meadow - Pipewellheugh - Wilton Dean - Burnhead to Bucklands - Mansfield House Hotel - Planted trees</i> | |
| 4. Rivers and burns | 32 |
| <i>River Teviot and Slitrig Water - Stirches Burn - Boonraw Burn</i> | |
| 5. Parks and cemeteries | 43 |
| <i>Wilton Lodge Park and walled garden - Burnfoot - Wellogate Cemetery - Wilton Cemetery - The Motte</i> | |
| 6. Grassland | 49 |
| <i>Miller's Knowes and nearby fields - Hardie's Hill - Other grassland</i> | |
| 7. Ponds and wetland | 53 |
| <i>Heronhill Pond - Burnfoot mire</i> | |
| 8. Cultivated ground | 55 |
| <i>Allotment gardens - Other gardens - Arable fields - Arable weeds as casuals</i> | |
| 9. Roads and railways | 57 |
| <i>A7 trunk road - The old railway</i> | |
| 10. Urban habitats | 61 |
| <i>Walls - Pavements and parking areas - Industrial sites</i> | |



Map showing the boundary of Hawick Burgh 1925.

(Ordnance Survey of Scotland, Popular edition)

The survey area is slightly larger, as explained in the text.

The west end of the town falls in 10km square NT41, the centre and east end in NT51

BACKGROUND TO THE FLORA

1. Introduction

The 2014 survey

In 2014 I chose to record the flora of my home town, Hawick, in some detail. Hawick is in Roxburghshire and has a population of about 15,000. For a survey boundary I started from the burgh boundary, which encloses an area of close to 6km², but I modified it slightly to include recent housing which resulted in an area of close to 7km². This survey area comprises 13 whole or part monads (1km squares of the National Grid).

I had to choose a methodology. It was apparent that, if one wished to map the results, records at 1km scale would be boring, though they would be more than adequate as a contribution to national recording projects. 1km scale would be boring because the habitat colonised by a species would not be apparent, and in particular it would not be apparent whether or not the species was limited to the principal habitats of the survey area. These habitats are a block of ancient woodland at Whitlaw Wood, the River Teviot and the Slitrig Water which join in the town, the public park at Wilton Lodge, hill grassland, a pond, cultivated ground, the main roads and the line of the old railway and, finally, the housing and industrial areas. If 100m scale was used for all records and they were mapped with the 1:25,000 OS map as a background the match or otherwise with these habitats would be apparent.

I was never going to be able to make lists for all 100x100m units. The best I could hope for was monad coverage, so I had to think what I was actually going to do in the field. What I have settled for is to survey by monads, making a species list as I walked round each monad by a route which covered as diverse a set of habitats as possible. A notebook was used, rather than a recording card, and the 100m GR was recorded from a wrist-held GPS for all records made. For the more widespread species, a record was made only for the first sighting in a monad. For 'more interesting' species, those expected to be relatively scarce or to be especially good habitat indicators, separate records were made in every 100m unit where the species was found, often with supporting details such as 10m cell precision and quantity found. The choice of the 'more interesting' species was crucial. Interesting distribution maps depend on there being a fair number of 'dots', so the rare species do not yield interesting maps. I therefore included a good number of relatively frequent species that I wished to learn more about. Each monad was visited about three times over the season, so the common species, recorded just once per monad, accumulated about 25-30 records. A map

The flora of Hawick Burgh

for such species that shows both the 100m ‘dots’ and the monad distribution as open circles is the most informative.

This methodology proved fun to do. As the survey area is close to home, I was out for a couple of hours twice a week, never covering more than two monads in detail on an outing. That way was able to work with a notebook remembering, good enough, what has or has not been recorded in a square on the day without using a recording card with a pre-printed list of species.

The records were entered in a specialist computer database programme, MapMate, where maps of individual species were generated. Further analysis of the records was carried out by exporting the records to an Excel spreadsheet.

Species selection

The species recorded in the survey included all native plants and introductions that are naturalised or present as clumps, often arising from dumped garden material, that perpetuate themselves by vegetative growth. Planted trees were also recorded and the more prominent planted shrubs present in parks, cemeteries and other more or less public spaces. Massed planting of shrubs to provide groundcover by roundabouts, parking areas and similar places were ignored, as were the herbs and the more exotic shrubs in the flower beds and walled garden of Wilton Lodge Park. However garden weeds were recorded, though only in the few gardens visited which included the allotment gardens.

Nomenclature follows Stace, *New Flora of the British Isles*, 3rd edition. The microspecies of Hawkweed *Hieracium*, Dandelion *Taraxacum* and Bramble *Rubus* were not recorded.

Species summary

632 species, subspecies, hybrids and other distinct forms were recorded in the survey area in 2014 of which 447 are mentioned in the habitat descriptions. They can be summarised as follows:

| Status in Hawick Burgh | Recorded | % | Mentioned | % |
|---|-----------------|------------|------------------|------------|
| Native | 325 | 52 | 208 | 47 |
| Archaeophyte (<i>introduced before 1500 AD</i>) | 53 | 8 | 36 | 8 |
| Neophyte (<i>introduced after 1500 AD</i>) | 176 | 28 | 147 | 33 |
| Casual (<i>planted or short-lived introduction</i>) | 78 | 12 | 56 | 12 |
| Total | 632 | 100 | 447 | 100 |

The allocation of status is a subjective process and there is a small minority of species for which the epoch of introduction is uncertain.

Just over half the flora of the survey area is accounted for by native species, nearly a tenth by ancient introductions which include arable weeds and plants formerly used medicinally, more than a quarter by relatively recent introductions including many garden plants that are only narrowly naturalised and about an eighth by casuals that are mainly planted trees and shrubs.

The detailed records made during the survey have been shared with the Botanical Society of Britain and Ireland's joint vice-county recorders for Roxburghshire, Dr Roderick Corner and Jeff Waddell.

Species-richness

When I was planning my survey of Hawick Burgh I estimated the number of species (together with subspecies and other taxa) that I was likely to find at 350-400. This is very much less than the 632 actually found. It is interesting to consider the reasons for the discrepancy.

First, some comparisons from my many years recording in Berwickshire may be useful. If one takes an equivalent area to Hawick Burgh of about 7km² round the county town of Duns (population about 3,000) which includes the extensive policies of Duns Castle with its lake and wildlife reserve, commercial areas and the old railway, I find that 403 species have been recorded there between 1987 and 2013. This is a period during which I made two extensive surveys which did not neglect the urban areas and had similar species selection criteria to the Hawick survey. If one takes a similar area around the town of Eyemouth (population also about 3,000) which includes a long stretch of the Eye Water, the harbour and the sea shore as well as industrial areas and the old railway, I find that 484 species have been recorded in the same period. In a similar area round the coastal village of St Abbs which includes the village, St Abbs Head NNR and Coldingham Loch SSSI and which might be considered to hold the most botanically-rich habitats in Berwickshire and to be the most thoroughly recorded, 467 species were recorded on the same basis. Seeking an area somewhat similarly situated to Hawick but without a town, I have chosen an area just south of Lauder around Boon Bridge on the Leader Water where it joins the Boondreigh Water. This is an area with ancient woodland, unimproved neutral grassland, riverside, arable fields and the A68 trunk road. Only 319 species were recorded there on the same basis as the other areas.

Hawick Burgh appears to out-compete by a considerable margin anything Berwickshire has to offer, even on the coast where there are many species not

The flora of Hawick Burgh

found inland. Sadly, I must suggest that, while the greater urban area is a positive factor, the main reason for Hawick's apparent prowess is simply the result of more intensive recording. I was trying to make a complete inventory of Hawick Burgh in a way that was only attempted elsewhere at St Abbs Head. It just makes all the difference that I was out and about around Hawick at all seasons, especially when so many species are only present in very small populations, and had time to consider planted trees and shrubs in detail. Taking spring-flowering bulbs as an example, while my Berwickshire records show snowdrops and daffodils to be very widespread they show less-than-satisfactory coverage of some of the other species. In Hawick I surprised myself by what I found at the riverside. So many species that I had thought to be more or less confined to plantings can be found naturalised there, such as Winter Aconite *Eranthis hyemalis* and Early Crocus *Crocus tommasinianus*. Many unexpected native species were to be found there too.

Using the same format as for the 'species summary' above, the status of the species in the five areas can be compared as:

| Status | Hawick | % | Duns | % | Eye'th | % | S'Abbs | % | Boon | % |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Native | 325 | 52 | 261 | 65 | 326 | 68 | 358 | 77 | 255 | 80 |
| Archaeo | 53 | 8 | 40 | 10 | 60 | 12 | 42 | 9 | 31 | 10 |
| Neophyte | 176 | 28 | 72 | 18 | 77 | 16 | 56 | 12 | 31 | 10 |
| Casual | 78 | 12 | 30 | 7 | 21 | 4 | 11 | 2 | 2 | 0 |
| Total | 632 | 100 | 403 | 100 | 484 | 100 | 467 | 100 | 319 | 100 |

While most of the 'extra' species at Hawick are introductions, either of plantings or naturalised species, the native species-richness of the Hawick flora is still impressive by Scottish standards. This is amazing when one considers that, while Whitlaw Wood, Heronhill Pond and some of the fields to the south of the town are favourably managed for their botanical interest, there is virtually no attempt at botanically-orientated wildlife conservation in the town itself. Even Wilton Lodge Park is not managed in at all a botanically-friendly manner, with its emphasis on closely-mown grass and tidiness, while the riverside is managed more for flood-prevention than for wildlife and is narrowly constrained between built-up walls and embankments as far as flood-prevention will allow, leaving no associated wetland. Surprisingly the flora manages to exploit the fragments of untended ground so effectively that the urban flora is considerably richer than that of the surrounding countryside. In town and countryside alike, the natural habitats have become highly fragmented except for the relatively species-poor upland areas.

Nevertheless one must view the proliferation of introductions with some degree of concern. The habitat descriptions in this book demonstrate that while only a very few introductions are spreading uncontrollably, some of those that do are

becoming a real problem. Likewise some may wish to deplore the dumping of unwanted garden plants that goes on along roadsides, riversides and plantation-edges, where many species establish to form extensive self-perpetuating clumps.

The concept behind the habitat descriptions

A full Flora of an area usually contains a catalogue of all the species present with notes about each and also some general descriptive sections, particularly of the individual habitats. This plan is not suitable for the present purpose as the species accounts would be unduly long, so habitat descriptions only are presented accompanied by just a few distribution maps for individual species. The habitat descriptions focus mainly on the more 'interesting' species, those that are in some respects specialists. Many very widespread species such as Daisy, Dandelion, most Buttercups and most Docks are not mentioned at all. However the very widespread grasses that dominate the grassland areas are mentioned. Similarly not all the rare species are mentioned. Those excluded include some of the species requiring specialist skills for identification, some plantings and some poorly-naturalised introductions.

For most habitats, separate descriptions are given for each of the main localities. This subdivision of the habitat description is difficult to apply to the riverside vegetation, which is where a good deal of Hawick's botanical diversity is to be found. This is because of the multiplicity of microhabitats, such as the shingle islands, the immediate river's-edge and the aquatic habitat of the river itself which differ from the main bankings, themselves quite varied. These microhabitats are distinguished as far as practical but at the expense of listing individual sections of the river separately.

It is hoped that the reader will enjoy dipping into this book, seeking to gain an overall impression of the character of a chosen habitat, and will not be put off too much by the long lists of species. Both English and Latin names are given for each species, allowing the reader to choose which to focus on, perhaps with an illustrated identification guide to hand.

2. Geology and history

Geology

The flora of Hawick Burgh cannot be appreciated to the full without some understanding of the geology and history of the area. The underlying rocks of Hawick Burgh are Silurian greywackes. These are folded sandstones and shales that vary in chemical composition. The folding process has been so extreme that it is difficult to predict where the next outcrop of a particular layer will occur, so there is a complicated mixture of acid and neutral soils on the knowes. The haughs along the Teviot and Slitrig are alluvium with sand and gravel. The *Soil maps of Scotland*, 1981, show that the alluvium, with glacial moraine material, has been banked up high on the valley sides at Whitlaw Wood on the Slitrig and Pipewellheugh on the Teviot. There the glaciers have deposited it in the lee of ridges in a complex interplay with meltwater cutting across the line of glacial advance, leaving unstable slopes and scaurs that are subject to erosion.

History: the landscape and habitats of Hawick from the first half of the nineteenth century

It may come as a surprise to some that quite the largest landscape change in the last two centuries has been the loss of arable fields. Today there are no arable fields within the strict boundary of the Burgh, though one small arable field at Gala Law falls just within the survey area. In the early nineteenth century there



Hawick from Lynnwood c. 1900, with cultivated land on the haugh by the Slitrig and by The Motte, with recently felled woodland between

Geology and history

were arable fields at Lynnwood adjoining The Motte, where the housing known as The Terraces now stand, at Burnfoot and at Stirches. In addition, from 1766, Archibald Dickson and Sons managed extensive nurseries, best known for their hedging stock, in the haugh above the High School (see front cover) and again in the then undeveloped haugh downstream from Mart Street. From 1878 there were also John Forbes' extensive Buccleuch Nurseries where the housing at Stonefield has just been demolished. There he grew a very wide range of plants in beds and extensive glasshouses. The fact that most development was on cultivated ground means that very little natural habitat has been lost in the process.



A7 trunk road through Pipewellheugh 1950's

Then, as now, the main areas of old woodland were at Whitlaw Wood, continuing along the scaurs by the Slitrig Water to the dean at Lynnwood, at Pipewellheugh where the A7 trunk road now leaves the town to the west, along the lower part of the Boonraw Burn between Burnhead and Bucklands and in Wilton Dean. Whitlaw Wood was soon to be cut into by the railway to the south of the Six-arch Bridge over the Slitrig, while Pipewellheugh was cut across by the A7. Indeed it is hard to imagine the town without the A7 where it now is. There was quite a lot of nineteenth-century tree planting: at Wilton Lodge, in the policies of the villas on Sunnyhill, behind what is now the Mansfield Park Hotel, in the policies of Wilton Manse and in both Wellogate and Wilton cemeteries.

The flora of Hawick Burgh

Hawick Burgh still boasts quite extensive areas of unimproved neutral grassland along the knowes to the south of the town. An interesting section was cut across by the railway cutting just to the north of the Six-arch Bridge. Part of the unimproved grassland there has been progressively lost to the uncontrolled spread of whins. The old grassland to the north of the town is on more acidic rocks and some of it has been lost to housing at Stirches and Burnfoot while the bracken-covered slope between Stirches and Gala Law has also been invaded by whins and hawthorn.



Hardie's Hill, with few whins, from scrub on recently-felled Whitlaw Wood 1920's

The riversides of the Teviot and Slitrig are a very varied habitat that has seen many changes over the years. Nevertheless, taken as a whole, the changes have not very markedly affected the plant diversity. The plant communities are dynamic and losses at one locality are often made up by gains at others. The shingle islands, in particular, are regularly re-sculpted by winter floods.

Hawick Burgh is almost devoid of wetland away from the riversides. The sides of the Stirches and Boonraw burns have been drained as have the haughs of the Teviot at Mansfield. Former wetland at Heron Hill has been dammed to create Heronhill Pond and there is a small patch of wetland where the Lilliesleaf road joins the A7 at Burnfoot, though this has been partly drained within the last thirty years.

Geology and history

The urban areas have seen many changes with the rise and decline of the knitwear industry, the coming of the railway and its eventual closure and with modern housing. The plants of urban habitats thrive on change, as they exploit disturbed ground. So there have been more gains than losses. However the railway ballast and the railway bankings were particularly rich plant habitats and major changes have followed the closure of the railway and the redevelopment of the station area for the Leisure Centre.

Historical botanical records

There are rather few historical botanical records from Hawick, as opposed to the surrounding countryside. Sir James A H Murray wrote articles in the Hawick Monthly Advertiser (later the Hawick Advertiser) in the 1850's in which he describes the habitats of species through the seasons but usually without localities, while such localities as he does give are mostly outside Hawick Burgh. The same is the case in his *Contributions to a Flora of Teviotdale* 1863-1867 published in the transactions of the Hawick Archaeological Society, which he helped to found in 1856. Nevertheless there are several observations of interest and I have mentioned these in the habitat descriptions. The *List of Indigenous Plants* in Jeffrey's *The History and Antiquities of Roxburghshire*, 1864 was substantially a list compiled by Rev James Duncan of Denholm before his death in 1861. Here again few localities within Hawick Burgh are listed, but I have mentioned the few most relevant ones in the habitat descriptions.

In recent decades there has been much more botanical recording in Roxburghshire as a whole, in large measure the work of Dr Roderick Corner but with some input from others, including myself and my wife. Very little of this work has been published other than in summary form at 10km scale in the two Atlases of the British Flora published by the Botanical Society of the British Isles in 1962 and 2002. I do have privileged access on the web to the detailed individual records in the BSBI distribution database, but I have only made limited use of this facility because here again relatively few detailed localities are given for the records within the burgh and I have chosen not to attempt to list the probable local extinctions.

My own *A Railway Flora of Teviotdale*, 1975, gives a description of the habitats of the disused railway within the town. I have not attempted a detailed comparison between that account and the present survey.

My railway survey led me to suggest to Chris Badenoch of the Nature Conservancy Council that he survey Whitlaw Wood, which he did in 1977. He made a follow-up survey in 1980 and SSSI notification followed in 1981. There was a further NCC report in 1986 and a vegetation survey in 1994. Meanwhile

part of the wood became a Scottish Wildlife Trust reserve in 1985 and I carried out further surveys in 1985 and 1989. T J N Cheadle and others did survey work in 1995 while drawing up a management plan for SWT. More recently, Neil Dickson and Sonali Ghosh made very detailed rare plant surveys in Whitlaw Wood in 2002, 2003 and 2005.

Around 2005 Derrick Moore and Irene Beston published three very attractive small booklets of wildflower photographs illustrating Wilton Lodge Park, the riverside walk from Hornshole to Hawick and the Waverley Line. Moore has an impish sense of humour and I suspect that some of the curious identifications offered were a deliberate ploy to stimulate debate. An exhibition of his work in Wilton Lodge Museum followed in 2011.

References

- Botanical Society of Britain and Ireland, *BSBI distribution database*, bsbi.org.uk, web resource accessed 2014.
- Braithwaite, M E, 1975, *A Railway Flora of Teviotdale*, privately published, Hawick.
- Duncan, J, 1864, *List of Indigenous Plants*, in: Jeffrey, A, *The History and Antiquities of Roxburghshire and adjacent districts*, **4**, 373-407, London.
- Moore, D, Beston, I, nd (c.2005), *The Wild Flowers of Hawick*, 3 booklets, Roxburgh House Studios, Hawick.
- Murray, J A H, 1863-1867, *Native Plants of Teviotdale and Contributions to the Flora of Teviotdale*, in: *Transactions of the Hawick Archaeological Society*, Hawick Archaeological Society, Hawick.
- Perring, F H, and Walters, S M, eds., 1976, *Atlas of the Flora of the British Isles*, 2nd edition, BP Publishing for the Botanical Society of the British Isles, Wakefield.
- Preston, C D, Pearman, D A & Dines, T D, eds., 2002, *New Atlas of the British and Irish Flora*, Oxford University Press, Oxford.
- Soil Survey of Scotland Staff, 1981, *Soil maps of Scotland*, at a scale of 1:250,000, Macaulay Institute for Soil Research, Aberdeen.
- Stace, C A, 2010, *New Flora of the British Isles*, 3rd edition, Cambridge University Press, Cambridge.

THE HABITATS AND THEIR FLORA

3. Woodland

Whitlaw Wood and meadow

Whitlaw Wood together with the scaurs along the Slitrig to the dean at Lynnwood are much the most natural wildlife habitat in Hawick Burgh. Only half the wood is in the Burgh, but my survey in 2014 has covered the whole, not least as it is now recognised as a Site of Special Scientific Interest. Part is a reserve of the Scottish Wildlife Trust.



Lynnwood Mill and Whitlaw Wood with conifers c. 1905

Old postcards and photographs collected by Jake Coltman have revealed the extraordinary history of the woodland. The earliest postcard, mailed in 1905, shows the old Lynnwood Mill on the haugh with the wood behind. The woodland is dominated by fairly mature Norway Spruce *Picea abies*, though some scrubby woodland is also visible on the lower slopes. The next postcard, from the early 1920's (page 14), shows the wood felled with just a low covering of scrub. A photograph from about 1960, taken in May with the whins *Ulex europaeus* on Hardie's Hill in full flower, shows mixed deciduous woodland. My own photograph in 1989, taken at the beginning of May, shows the diversity of the tree cover as the leaves open in succession in the spring. So this wood has

The flora of Hawick Burgh

been felled frequently, with spruce planted around 1840 when it was very much in fashion. The next felling appears to have been during the First World War, quite possibly to provide timber for Stobs Camp. Labour to replant would not have been available during the war, so it was left to regenerate on its own, a happy accident that has left us with a much richer resource than could have been expected. Not all the regeneration was of native trees, there was Beech *Fagus sylvatica* and Sycamore *Acer pseudoplatanus* as well. Much of the beech and sycamore was felled in 2004 by the Scottish Wildlife Trust as their heavy shade was detrimental to the ground flora.



Whitlaw Wood and Six-arch Bridge from Hardie's Hill c. 1960

A glory of Whitlaw Wood is the diversity of tree and shrub species. There is a little oak *Quercus* on the upper slopes, probably mostly planted, but Ash *Fraxinus excelsior* and Wych Elm *Ulmus glabra* account for most of the taller trees along with Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa* and Ivy *Hedera helix*. Rowan *Sorbus aucuparia* and Holly *Ilex aquifolium* are rare while Honeysuckle *Lonicera periclymenum* appears to be absent. Gean *Prunus avium* is prominent on the steepest slopes, where it suckers, while Hazel *Corylus avellana* and willows, particularly Goat Willow *Salix caprea*, are abundant on the lower slopes with Alder *Alnus glutinosa* at the river's edge and in some of the wet ground on the slopes. The remaining beech is chiefly on the scaurs at the Lynnwood end of the wood proper, while the remaining sycamore is quite widely scattered. There is some birch, almost all Silver Birch *Betula pendula*, rather

Woodland

than Downy Birch *B. pubescens* which is more widespread in the area as a native species, and birch has colonised the former railway cutting through the wood as a dense strip of young trees that stands out clearly when viewed from Hardie's Hill. The Silver Birch may be native, but it could have naturalised from planted trees in the town. The elms were almost eliminated by Dutch elm disease in the



Whitlaw Wood in April 1989 with willows and gean in flower

1970's but have now recovered to the point when their yellow immature fruits make a landscape feature in late April, just before the leaves unfurl. Bird Cherry



Bird Cherry *Prunus padus*

Prunus padus is surprisingly rare, but there is a fine grove of this species in the dean at Lynnwood, formed by layering and suckering, whose blossom can be picked out in May from the road on the other side of the Slitrig. Guelder-rose *Viburnum opulus* is a shrub that is a speciality of the wood, but it could only be refound in 2014 at one of the three places where it had been recorded in 1989 and may have been out-competed by the profuse

tree regeneration, particularly of ash, that has followed the felling of beech and sycamore. Introduced trees and shrubs, naturalised in small quantity, include

Norway Maple *Acer platanoides*, Scots Pine *Pinus sylvestris*, Barberry *Berberis vulgaris* and Red-berried Elder *Sambucus racemosa*, the latter bird-sown alongside the native elder *S. nigra* which is black-berried. SWT have been supplied with some Grey Alder *Alnus incana*, presumably when they had ordered Common Alder *A. glutinosa*, and this has grown strongly where it has been planted in wet places on the upper slopes. Snowberry *Symphoricarpos albus* has been dumped at the top of the scaurs and has naturalised there.



Multi-trunked oaks in Whitlaw Wood 2014

In view of the wood's history it is inevitable that there are no veteran trees as such. The oldest single-stemmed trees are possibly a group of oaks near the east end of the meadow that might date from the 1930's and are Pedunculate Oak *Quercus robur*. At the extreme east end of the wood there are some other mature oaks which may have a better claim to be native. Many of

them are multi-trunked. Most appear to be Pedunculate Oak but some are close to Sessile Oak *Q. petraea*, though they are also hybrids between the two species and these may include some of the trees that look like Pedunculate Oak. Further hybrid oaks occur in a few places on the lower slopes and some show evidence of coppicing. The species that come away again from stumps and suckers after felling, like hazel, gean, alder, bird cherry, blackthorn and guelder-rose, may have



Regrowth following beech felling 2014

some clumps that are very much older than the oaks.



Wood Anemone *Anemone nemorosa*

Goldilocks Buttercup *Ranunculus auricomus* (see map, intensively recorded), a local species in the Scottish Borders, is extraordinarily widespread in the wood and Sweet Woodruff *Galium odoratum* is well represented, mainly under hazel and oak. The narrow strip by the Slitrig and the lowest slopes of the woodland behind are home to some of the more specialised woodland plants, which include Moschatel *Adoxa moschatellina*, Alternate-leaved Golden-saxifrage *Chrysosplenium alternifolium* (with the common Opposite-leaved Golden-saxifrage *C. oppositifolium*), Meadow Saxifrage *Saxifraga granulata*, Wood Stitchwort *Stellaria nemorum* and Large Bitter-cress *Cardamine amara* along with Sweet Cicely *Myrrhis odorata*, which is an old introduction. Toothwort *Lathraea squamaria* is another speciality, with good colonies as a

The ground flora is also diverse and includes some scarce species. The wood is a fine sight in the spring when an abundance of Wood Anemone *Anemone nemorosa* (see map, intensively recorded) is in flower on the drier banks. This is a clonal species forming large vegetative patches, some of which are likely to date back hundreds of years. The wet gullies are carpeted with Ramsons *Allium ursinum* and in between there is Dog's Mercury *Mercurialis perennis* and some Primrose *Primula vulgaris*. The latter, though widespread, is not particularly plentiful. Other common species present are Red Campion *Silene dioica*, Greater Stitchwort *Stellaria holostea* and Common Violet *Viola riviniana*.

Anemone nemorosa (Wood Anemone)



root-parasite mainly on hazel and elm not far downstream of the old railway. This species was surveyed in detail in 2002 when it was found in twenty-two 10x10m cells. By 2005 it had declined to eight such cells, following disturbance from the felling of beech and sycamore and by a section of the bank being swept away in floods, but it had recovered to twelve cells by 2014. Early-purple Orchid *Orchis mascula* was widespread in the wood in the 1970's but has declined, as in so many of its inland sites in the Scottish Borders, and only one modest colony was found in 2014.

The brambles are very remarkable. In addition to varieties of the Common Bramble there are two colonies of the locally scarce Stone Bramble *Rubus saxatilis* under hazel and oak. This is a species normally found in hill cleughs. In a sunny position by the old bridge abutment there is a colony of Dewberry *Rubus caesius*. This species is more typical of the coast and south-facing banks by the lower Tweed.



Goldilocks Buttercup *Ranunculus auricomus*
It often has imperfect petals

Ranunculus auricomus (Goldilocks Buttercup)



Two attractive clumps of Green Hellebore *Helleborus viride* grow near the Slitrig, where they have been since 1975 or earlier. This is an old garden introduction that is now very rarely cultivated. Lungwort *Pulmonaria officinalis* has naturalised nearby with Early Goldenrod *Solidago gigantea* a little further downstream. Welsh Poppy *Mecanopsis cambrica* is occasional as a naturalised garden escape.

Bluebell *Hyacinthoides non-scripta* is absent, but Garden Bluebell *H. x massartiana* occurs by the path near the east end of the wood and may spread. An altogether more worrying recent introduction is Few-flowered Garlic *Allium paradoxum* which is now present in a few places near the stables at the east end

of the wood and can be expected to colonise extensively in the coming decade to the detriment of the native flora in springtime.



Sweet Cicely *Myrrhis odorata*

Later-flowering species in the wood include Bugle *Ajuga reptans*, Wild Strawberry *Fragaria vesca*, Marsh Hawk's-beard *Crepis paludosa*, Wood Crane's-bill *Geranium sylvaticum* with a little Meadow Crane's-bill *G. pratense* at the riverside, Water Avens *Geum rivale*, Wood Avens *G. urbanum* and their hybrid, Wood Pimpernel *Lysimachia nemorum*, Sanicle *Sanicula europaea*,

Common Valerian *Valeriana officinalis* and Wood Speedwell *Veronica montana*. There are scattered plants of Giant Bellflower *Campanula latifolia* at the river's edge, especially fine near the site of the former Six-arch Bridge, while a few plants of Bird's-nest Orchid *Neottia nidus-avis* still turn up in scattered locations in the wood. This orchid was much more plentiful under the hazels in the 1970's. There is a little Common Spotted-orchid *Dactylorhiza fuchsii* and Northern Marsh-orchid *D. purpurella*. There are some spectacular patches of Wood Vetch *Vicia sylvatica*, one of the glories of the wood. It thrives best in glades. It was formerly plentiful along the railway embankment in the wood, but this has now been densely colonised by birch, shading out much of the vetch. The felling of beech and sycamore opened up glades where the best patches are now found, but these are now colonised by ash and the vetch is beginning to suffer. The old railway was



Cauld at site of the Six-arch Bridge

now colonised by ash and the vetch is beginning to suffer. The old railway was

The flora of Hawick Burgh

formerly the site for a colony of Cowslip *Primula veris*, but only two plants now survive there along with one of the hybrid with Primrose.

At the top of the slopes there are woodland-edge species such as Pignut *Conopodium majus* and Bitter-vetch *Lathyrus linifolius*. Blaeberry *Vaccinium myrtillus* was present on old conifer stumps in the 1970's but appears to have gone.

Ferns are reasonably prominent in the wood but, rather strangely, Hard Shield-fern *Polystichum aculeatum* is absent. It prefers rocky substrates. However one plant of Soft Shield-fern *P. setiferum* was found in 2014. It is more likely to have spread in recently, perhaps from gardens in the town, than to be native in this wood. Another colonist is Hart's-tongue Fern *Asplenium scolopendrium*, now found on a wall by the old bridge abutment. There is a bed of Bracken *Pteridium aquilinum* next to the meadow above the wood.



Scaurs above recent housing at Lynnwood

The open ground on the scaurs has a somewhat specialised flora which includes Colt's-foot *Tussilago farfara*, Hawkweeds *Hieracium agg.* and various St John's-worts *Hypericum spp.* Hairy St John's-wort *H. hirsutum* is accompanied by Imperforate St John's-wort *H. maculatum* and its hybrid with Perforate St John's-wort *H. perforatum*, a distinction recognised here on the scaurs by Sir James A H Murray in the 1860's. The latter is quite frequent elsewhere in the town and it seems rather likely that Imperforate St John's-wort was the native species and Perforate St John's-wort an incomer, introduced both at an early date for medicinal use and again with the railway, as it favours railway ballast as a

habitat. The hybrid is fertile and backcrosses with the parents giving rise to a series of intermediates.

Whitlaw Wood has interesting grasses and sedges. Woodland grasses that are widespread include False-brome *Brachypodium sylvaticum*, Hairy Brome *Bromopsis ramosa*, Bearded Couch *Elymus caninus*, Wood Meadow-grass *Poa nemoralis* and Giant Fescue *Schedonorus giganteus*. Bearded Couch and Wood Meadow-grass are unusually prominent. Wood Melick *Melica uniflora* is present under oak in one place only. The most prominent sedge is Wood Sedge *Carex sylvatica*, often more or less restricted to path sides and deer tracks, but here rather generally distributed. Remote Sedge *C. remota* is present in very small quantity quite high up the slopes, not under alders by the Slitrig, which would have been a more typical habitat. Glaucous Sedge *C. flacca* is found on the scaurs. Hairy Wood-rush *Luzula pilosa* is quite frequent while Great Wood-rush *L. sylvatica* is unexpectedly rare.

There is small meadow above Whitlaw Wood which is part of the SWT reserve. The central part is cut annually in late summer while the margins are left uncut. The margins have much Meadowsweet *Filipendula ulmaria* with some Wood Crane's-bill *Geranium sylvaticum* (see map, intensively recorded), Water Avens

Geranium sylvaticum (Wood Crane's-bill)



Geum rivale and rushes. There is a good showing of roses with Soft Downy-rose *Rosa mollis* the most prominent. The central part has Cuckooflower *Cardamine pratensis*, including some double-flowered plants, and two species of Lady's-mantle *Alchemilla filicaulis* subsp. *vestita* and *A. xanthochlora*. There is a large population of Common Spotted-orchid *Dactylorhiza fuchsii* and a little Northern Marsh-orchid *D. purpurella* with their hybrid.

Melancholy Thistle *Cirsium heterophyllum* was recorded in 2002, but it is not clear whether the record was from the meadow or from the wood.

Pipewellheugh

The wood that borders the A7 trunk road to the west of the town at Pipewellheugh must once have been similar to Whitlaw Wood as it too is situated on wet eroding slopes. The main part above the road has seen many changes and has lost much of its native flora. However Ramsons *Allium ursinum* is so abundant under the sycamore plantation that motorists often remark on the strong whiff of garlic as

they drive along the road in the spring. It is accompanied by a strong colony of Hard Shield-fern *Polystichum aculeatum*, noted above as absent from Whitlaw Wood. Immediately above the road there is a large colony of Pyrenean Valerian *Valeriana pyrenaica*, which is today, as will be seen below, a notable feature of the town's flora. The narrow strip between the road and the Teviot is a complete contrast. It is remarkably natural woodland with hazel, alder, gean and willows. The ground flora includes Wood Anemone *Anemone nemorosa* and Hart's-tongue Fern *Asplenium scolopendrium* with the grasses Hairy Brome *Bromopsis ramosa* and Bearded Couch *Elymus caninus*.

Wilton Dean

All of Wilton Dean has been included in the survey area, though the upper part is outwith the Burgh boundary. The lower part of the dean, just above the park, is mainly beech and the ground flora is sparse. Then come the houses of Wilton village. The upper part of the dean has many planted trees but it has a natural feel to it and there is native ash, elm, gean and hazel with Downy Birch *Betula pubescens* and naturalised Norway Maple *Acer platanoides*. Hornbeam *Carpinus betulus* has been planted near the houses. The ground flora includes Wood Anemone *Anemone nemorosa*, Woodruff *Galium odoratum*, Honeysuckle *Lonicera periclymenum*, Dog's Mercury *Mercurialis perennis*, Primrose *Primula vulgaris*, Goldilocks Buttercup *Ranunculus auricomus*, Sanicle *Sanicula europaea* and Greater Stitchwort *Stellaria holostea*. There is a bank at the very top of the dean with Rockrose *Helianthemum nummularium*. Amongst the ferns present in some quantity are Hart's-tongue Fern *Asplenium scolopendrium* and Hard Shield-fern *Polystichum aculeatum* with a little of the latter's hybrid with Soft Shield-fern *P. x bicknellii*. Woodland grasses include Bearded Couch *Elymus caninus* and Wood Meadow-grass *Poa nemoralis*.



Pink Purslane *Claytonia sibirica*

Pink Purslane *Claytonia sibirica* is a garden plant that is widely naturalised, as are Lords-and-ladies *Arum maculatum*, Welsh Poppy *Mecanopsis cambrica* in both yellow and orange-flowered forms, Wood Forget-me-not *Myosotis sylvatica* and Fringecups *Tellima grandiflora*, while more narrowly naturalised near the houses are Greater Cuckooflower *Cardamine raphanifolia*, an uncommon species, Perennial Cornflower *Centaurea montana*, Snow-in-summer *Cerastium tomentosum*, Garden Bluebell *Hyacinthoides x massartiana*,

Dotted Loosetrife *Lysimachia punctata*, Musk Mallow *Malva moschata*, Star-of-Bethlehem *Ornithogalum umbellatum* subsp. *campestre* and Feverfew



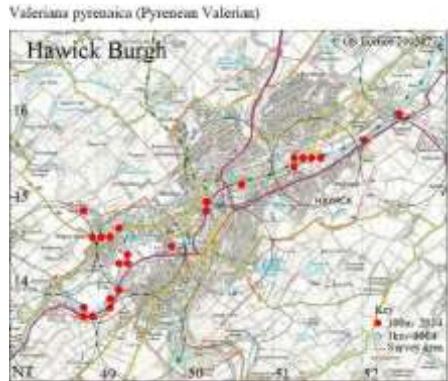
Tanacetum parthenium. Today there is a massive colony of Pyrenean Valerian *Valeriana pyrenaica* (see map, intensively recorded) on a burnside bank opposite the houses where Sir James A H Murray knew only a small patch in the 1860's, then the only colony in the town.

Fringecups *Tellima grandiflora*

Burnhead to Bucklands

The banks of the Boonraw Burn between Burnhead

and Bucklands are wooded and retain some natural plant communities. There are some fine oaks in the upper section above the line of the old railway with Sanicle *Sanicula europaea* and Primrose *Primula vulgaris* while the lower section down to the Teviot has alder and elm with wet ground beside the burn. Here are Moschatel *Adoxa moschatellina*, Large Bitter-cress *Cardamine amara*, Opposite-leaved Golden-saxifrage *Chrysosplenium oppositifolia*, Pink Purslane *Claytonia sibirica*, Wood Crane's-bill *Geranium sylvaticum*, Hybrid Avens *Geum x intermedium* with both its parents, Dog's Mercury *Mercurialis perennis* and Three-veined Sandwort *Moehringia trinervia*. The ferns include Hard Shield-fern *Polystichum aculeatum* and Soft Shield-fern *P. setiferum*. The latter is by the burn below a house and is an escape of a cultivated variety, possibly *var. divisilobum*.



Burn between Burnhead

Mansfield House Hotel

There is a sizable block of woodland behind the Mansfield House Hotel which is a plantation with only modest natural features retained within it that hint as much

of a history as acid grassland as of former scrubby woodland. The trees include ash and elm with Norway Maple, Horse Chestnut, Silver Birch and Lawson's Cypress *Chamaecyparis lawsoniana*. Honeysuckle is present with Cherry Laurel *Prunus laurocerasus* and Rhododendron *Rhododendron ponticum* as the most prominent shrubs. The ground layer has only a very little Wood Anemone *Anemone nemorosa* which may be a grassland relict as may be Pignut *Conopodium majus* while Three-veined Sandwort *Moehringia trinervia*,



Welsh Poppy *Mecanopsis cambrica*

Primrose *Primula vulgaris* and Wood Speedwell *Veronica montana* are more suggestive of former natural woodland as is Wood Sedge *Carex sylvatica*, though it could have been introduced. Introductions that have naturalised to various extents are Hart's-tongue Fern *Asplenium scolopendrium*, Hard Shield-fern *Polystichum aculeatum*, Brittle Bladder-fern *Cystopteris fragilis* and Wall Lettuce *Mycelis muralis* on garden walls, and, in the woodland, Spurge-laurel *Daphne laureola*,

Leopard's-bane *Doronicum pardalianches*, a robust form of Woodruff *Galium odoratum*, Garden Bluebell *Hyacinthoides x massartiana*, Tutsan *Hypericum androsaemum*, Oregon-grape *Mahonia aquifolia* and Welsh Poppy *Mecanopsis*

cambrica. These introductions, taken as a whole, are very characteristic of the policies of large Victorian houses, with their shrubberies and ferneries.

Planted trees

The survey included as wide a coverage of planted trees as practical, concentrating on those in public places and garden trees that are so large that they impact on the environment of their neighbourhood. Planted shrubs were much more selectively recorded, with massed plantings by roads and the more exotic species in the public parks being excluded. The tree plantings fall broadly into two groups, those typical of the Victorian era and those typical of recent decades.

The Victorian era was when most of the conifers planted in Britain first came here and planting conifers became something of a craze. They were freely available in Hawick because of the presence in the town of the two large plant nurseries, Archibald Dickson and Sons and John Forbes' Nurseries. The tree

Chamaecyparis lawsoniana (Lawson's Cypress)



which was considered a must-have was Lawson's Cypress *Chamaecyparis lawsoniana* (see map, selectively recorded) and this was planted to excess in Wilton and Wellogate cemeteries, in Wilton Lodge Park and in the grounds of the larger houses, especially on Sunnyhill. Many varieties have been cultivated and these did much to enhance the tree's popularity. A wide selection of these can be found in the town. Yews were among the

shrubs often planted along with the Cypress, either the Common Yew *Taxus baccata* or its cultivar Irish Yew *forma fasciculata*, together with Cherry Laurel *Prunus laurocerasus* (see map, selectively recorded), Portuguese Laurel *P. lusitanica*, Rhododendron *Rhododendron ponticum* and Oregon-grape *Mahonia aquifolium* which may naturalise. Shelter and privacy was provided, as intended, but the overall effect became much more funereal than had been envisaged, with the tall Lawson's Cypress particularly to blame. It is strange, in a way, that there has not been more culling of the cypresses.

Prunus laurocerasus (Cherry Laurel)



The other must-have was Wellingtonia *Sequoiadendron giganteum*, promoted as the largest tree in the world. Hawick has a splendid collection of these and they have still a long way to go before they reach their full height. Most are in the large gardens in Wilton and Sunnyhill but there is one in Wilton Lodge Park and two at Lynnwood. At the site of the old Wilton Manse above the Fire Station they are accompanied by Coastal Redwood *Sequoia sempervirens*, which has grown almost as well. Both these species are native in a humid climate on the western seaboard of North America and it has been surprising how well they have adapted to the less-moist climate of eastern Scotland.

The very tall, but rather gaunt, European Silver-fir *Abies alba* is very frequent in the policies of mansion houses in the Scottish Borders but is infrequent in Hawick. There is a tree by the south bank of the Teviot upstream of Laurie Bridge, another at Marchwood on Sunnyhill and another along Weensland. There are two Noble Fir *Abies procera* in Wellogate Cemetery, a stately species with blue-tinted leaves, and another in Stewart Place. Monkey-puzzle *Araucaria araucana* may be seen on Sunnyhill and in Wilton Cemetery. There are only a few cedars: two forms of Atlas Cedar *Cedrus atlantica* have been planted near Wilton Lodge Museum, one with the leaves blue-tinted. Deodar *Cedrus deodara* is the cedar best suited to the Hawick climate and can be seen on the south bank of the Teviot upstream of Laurie Bridge, on Sunnyhill and at Wilton School where Cedar-of-Lebanon *Cedrus libani* also grows. Other conifers of Wilton Lodge Park include two further Cypresses *Chamaecyparis obtusa* and *C. pisifera*, Oriental Spruce *Picea orientalis*, Douglas Fir *Pseudotsuga menziesii* and Western Hemlock *Tsuga heterophylla*. Large trees of Austrian Pine *Pinus nigra* subsp. *nigra* are a feature of Wilton and Sunnyhill, there are two especially fine trees at Salt Hall and another at Deanfield care home. Corsican Pine *Pinus nigra* subsp. *laricio* can be found at Wilton and recent planting of Lodgepole Pine *P. contorta* at Galalaw. The spruces are relatively short-lived trees so they are mostly found in some of the more recent plantings, such as the a line of less-than-elegant trees of Norway Spruce *Picea abies* at Wilton School and some Sitka Spruce *P. sitchensis* in plantations at Burnfoot. Of the more exotic species, Italian Cypress *Cupressus sempervirens* is found in Wilton Cemetery and Hiba *Thujaopsis dolabrata* at Langlands on Sunnyhill. Leyland Cypress *X Cuprocyparis leylandii* is now used in hedging to excess but specimen trees are rare, though some may be seen by the Wester Braid Road.

Broad-leaved trees have been planted at every stage in the town's development. Species most typical of the Victorian era include Holly *Ilex aquifolium* with variegated varieties and a nearly spineless hybrid *P. x altaclerensis*, as found in Wilton Lodge Park. A tree that is unusually frequent in Hawick and which is known to have been promoted by Forbes' Nurseries, as two specimens flanked their entrance, is the weeping variety of Ash *Fraxinus excelsior* 'Pendula'. There are two fine specimens in Wilton Lodge Park and another in Wilton Cemetery, but it is more general than that. There is an old tree in the garden at 19 Buccleuch Street which became a nuisance to us when I worked there as it was knocking against the windows. It was pollarded where the branching began and, much to my surprise, grew back to an acceptable shape in just a couple of years. Hornbeam *Carpinus betulus* is another Hawick speciality. It is native to Britain but not to our area and somewhat similar to beech, but generally a smaller tree. There is a line of old trees by the path along the Teviot upstream of the High School. It is sometimes used in hedging. In recent years a compact variety of

Woodland

this species *var. pyramidalis* has found favour as a street tree and is to be seen in several places, as by the modern flats at the entrance to Carnarvon Street. Sycamore *Acer pseudoplatanus* is very widespread in the town both planted and self-sown. A variety with purple-tinted leaves has become popular in recent years and has been found at Stirches. Norway Maple *Acer platanoides* has much more attractive autumn colour than sycamore and has been widely used. It too regenerates freely where it has the chance. A purple-leaved variety has been seen in Burnfoot and by the Teviot near the Leisure Centre. Field Maple *Acer campestre* has only been seen on a roadside bank at Lynnwood, while several other maples are popular in gardens for their autumn colour. Lime *Tilia x europaea* is the main planting at the Common Haugh. Horse Chestnut *Aesculus hippocastanum* has been planted in various places, including one that is prominent in Wilton Lodge Park, while Sweet Chestnut *Castanea sativa* was only seen near Buccleuch Road.

Cherries are very popular for their spring blossom. Most of the old plantings are of Gean *Prunus avium*, sometimes as a double-flowered variety which holds its blossom longer than the type, but most recent plantings are of other species and hybrids which have not been studied in detail. Japanese Cherry *Prunus serrulata* is found in Wellogate Cemetery and elsewhere. Various apples are also planted as ornamentals, especially the purple-leaved *Malus x purpurea*.

The native trees are discussed under the main woodlands. Other species of note include Grey Alder *Alnus incana* included in plantings in Burnfoot, White Poplar *Populus alba* by the Teviot at Mansfield, Aspen *Populus tremula* included in plantings in Weensland, Red Oak *Quercus rubra* at Stirches, Common Whitebeam *Sorbus aria* in Wellogate Cemetery and Swedish Whitebeam *S. intermedia* in Wilton Cemetery.

Of the shrubs mention may be made of Flowering Currant *Ribes sanguineum* as it has naturalised in many places as well as being planted. Two roses that are used as hedging plants are Japanese Rose *Rosa rugosa* and a robust cultivar of Burnet Rose *R. spinosissima*. Both of these species can sucker aggressively. Burnet Rose used to grow as a native species in the railway cutting at Whitlaw Wood and is still to be found in the cutting to the south, just outside the survey area.

4. Rivers and burns

River Teviot and Slitrig Water

The flora of the riverside unfolds through the seasons, with the plants that make up the varied spring flowering soon becoming swamped by the summer foliage. The first to flower are the widespread Snowdrops *Galanthus nivalis*: both the single and double-flowered varieties together with rather few clumps of a later-flowering plant that has larger flowers and slightly in-rolled leaves that is believed to be the hybrid with Pleated Snowdrop *G. plicatus*. The single and double-flowered snowdrops spread equally freely, even though the double-flowered plants produce no seed. This demonstrates that snowdrops spread by bulb division below ground and rely on disturbance by floods or animals (including us) to spread the bulbs around. The only crocus to naturalise is the Early Crocus *Crocus tommasinianus* which was found in several places. Winter Aconite *Eranthis hyemalis* is also naturalised, with colonies in a few spots on the banks, as is Glory-of-the-snow *Scilla forbesii* and Garden Grape-hyacinth *Muscari armeniacum*. Patches of Wood Anemone *Anemone nemorosa* are found far from the main woodland areas, as is Goldilocks Buttercup *Ranunculus auricomus*. Two other Anemones occur: Yellow Anemone *Anemone ranunculoides* is found just below the Weensland Petrol Station (it is more extensively naturalised further downstream towards Trowmill on the north bank) while Blue Anemone *A. apennina* is found opposite Wilton Lodge Park. Inevitably there are daffodils of numerous cultivated varieties at intervals along the riverside where they are deposited by floods, but nowhere have they naturalised effectively. The wild-type *Narcissus pseudonarcissus* was not found anywhere and the only species-daffodil is a cultivar of Pheasant's-eye Daffodil *N. poeticus*, but even it is barely naturalised. Garden Bluebell *Hyacinthoides x massartiana* is widespread in the town as a whole but has few colonies by the riverside. Star-of-Bethlehem

Allium ursinum (Ramsons)



Ornithogalum umbellatum subsp. campestre is naturalised in a few places.

Much the most remarkable feature of the spring flora is the diversity of garlics *Allium spp.* There are four species, all four produce leaves in the spring but only two flower then. The spring-flowering species are Ramsons *A. ursinum* and Few-flowered Garlic *A. paradoxum*. As

we have seen above, Ramsons (see map, intensively recorded) is a native species abundant in Whitlaw Wood and at Pipewellheugh. Interestingly, it

occurs at intervals all the way down the Teviot, mainly in shade where there are some substantial colonies but sometimes in the open as well in small quantity. Few-flowered Garlic (see map, intensively recorded) is an introduction. It has been in and around the town for forty years but it is really only in the last decade that it has become obtrusive. It seldom produces seed, and the little seed produced may not be viable. Instead

it produces yellowish bulbils in the flower heads and its bulbs also divide freely below ground. These are spread in the same way as for snowdrops. Few-flowered Garlic is now abundant along the Teviot and must soon become



Few-flowered Garlic *Allium paradoxum*

Allium paradoxum (Few-flowered Garlic)



dominant there. I had thought it absent from the Slitrig but it has reached Whitlaw Wood in the last few years and is set to spread into the town. An open question is whether Few-flowered Garlic will out-compete Ramsons: I consider the jury to be still out on that one. The carpets of shining green leaves are so noticeable before the flowers open that I once dubbed Few-flowered Garlic 'Plastic-grass'. As yet it is relatively scarce in gardens, but this seems set to change to the major detriment of the cultivation of spring-flowering bulbs. It prefers shade but can also flourish in the open unless it is in grass that is cut frequently or in cultivated ground. However it dies down by the beginning of June and one then wonders what all the fuss was about.

The flora of Hawick Burgh

The two summer-flowering *Alliums* are interesting incomers. Wild Onion *A. vineale* (see map, intensively recorded) has narrow cylindrical leaves while its

Allium vineale (Wild Onion)



is still on the old railway at Hardie's Hill but has now reached the Slitrig at the site of the former Six-arch Bridge. Keeled Garlic *A. carinatum* (see map, intensively recorded) has channelled leaves with a keel as the name suggests. It flowers later than Wild Onion and is more colourful, as there is a higher proportion of crimson flowers among the bulbils. It was first recorded by the Teviot below Mansfield in 1951. It is still there on both sides of the river and is present in every 100m stretch to the Burgh boundary. Further downstream it is local, being especially

Allium carinatum (Keeled Garlic)



flowering stem has a round head with a mixture of purplish flowers and bulbils in mid-summer. It seems only to have colonised the Teviot in the last thirty years. The first record by the Teviot was in 1992 but it had been known on the old railway since 1952. I have been amazed to find that it is present in every 100m stretch of the Teviot through the town. I have traced it upstream and find that it first appears at Newmill on Teviot. Downstream it continues to the Tweed and on to Berwick. It



Wild Onion *Allium vineale*

prominent just upstream of Hornshole on the north bank, but it too continues to the Tweed and on to Coldstream. The exact source is unknown, but it may have been introduced in the nurseries of Archibald Dickson and Sons, at Weensland Mill or in the adjacent



Common Butterbur *Petasites hybridus*

Butterbur found in the Scottish Borders is ‘male’, suggesting that it is an ancient introduction that has spread by root fragments being carried down watercourses and that seed production is a rare event. Hawick is one of the few places where ‘female’ plants also occur, one such patch is almost under the Albert Bridge. There are two other Butterburs, both relatively recent introductions which have naturalised down the Slitrig. The very early-flowering White Butterbur *P. albus* is well established at the foot of Whitlaw Wood and is also found by the Teviot below Mansfield and Weensland. Japanese Butterbur *P. japonicus*, with its curious pagoda-shaped flower spikes, appears to have been introduced at Colislinn and to have spread down the Slitrig as far as St Cuthbert’s Church. Sweet Cicely *Myrrhis odorata* (see map, intensively recorded) is another ancient introduction that was used for flavouring

allotment gardens. It remains to be seen how these two species will cope with the invasion of Few-flowered Garlic.

One small colony of Toothwort *Lathraea squamaria* has been found parasitic on sycamore just downstream of the junction of Teviot and Slitrig, far from the two splendid colonies in Wilton Lodge Park and Whitlaw Wood.

The Butterburs are also interesting. Common Butterbur *Petasites hybridus* comes in two forms, a mainly male form and a mainly female form. The root was used medicinally, the huge leaves as a wrapping material and the male flowers as an early nectar source for bee keeping. Almost all the



White Butterbur *Petasites albus*

The flora of Hawick Burgh

Myrrhis odorata (Sweet Cicely)



when sugar and honey were luxuries. It is unusually plentiful by both the Teviot and Slitrig, favouring sandy alluvium on the riverbanks.

There are a number of less benign introductions. The most notorious is Giant Hogweed *Heracleum mantegazzianum* (see map, intensively recorded) which was getting a strong hold on the riversides before control measures were begun a few years ago. As it has a persistent seed bank, it is still present in small numbers all along the Teviot, but not the Slitrig, though no plants were found that had been allowed to seed. One plant that was in seed turned out to be the rare hybrid with Common Hogweed *H. sphondylium*. Japanese Knotweed *Fallopia japonica* has an even more evil reputation as its rhizomes can penetrate under paving and buildings causing serious damage. It does not spread so aggressively but is present at Lynnwood on the Slitrig and Weensland on the Teviot. Indian Balsam *Impatiens glandulifera* (see map, intensively recorded) also has a bad press. It is now present by the Teviot all the way from

Heracleum mantegazzianum (Giant Hogweed)



Impatiens glandulifera (Indian Balsam)



Parkdail to Bucklands but is not very plentiful and appears to be doing no harm at all. Leopard's-bane *Doronicum pardalianches* has somehow escaped censure, but it can rampage through woodland to the considerable detriment to the native flora as it has done at Denholm Dean. There is a strong colony at the foot of the burn by Overhall at the head of Wilton Lodge Park.

The riparian vegetation immediately adjacent to the river is varied. Reed Canary-grass *Phalaris arundinacea* is

dominant where there is much alluvium and is sometimes replaced by dense patches of Lesser Pond-sedge *Carex acutiformis*, while Bottle Sedge *Carex rostrata* was only found in small quantity just upstream of the Cauld.



Indian Balsam *Impatiens glandulifera*

Shady places have outlying clumps of the woodland grasses False-brome *Brachypodium sylvaticum*, Bearded Couch *Elymus caninus*, Wood Meadow-grass *Poa nemoralis* and Giant Fescue *Schedonorus giganteus*. Wood Stichwort *Stellaria nemorum* grows in similar habitat below Pipewellheugh and there are several localities by the Teviot for Fringe-cups *Tellima grandiflora* and Pyrenean Valerian *Valeriana pyrenaica*. The latter is conspicuous on the river wall next to the High School. Tall Fescue *Schedonorus arundinaceus* is a grass of unmown grassland that is more widespread while Meadow Fescue *Schedonorus pratensis*, a grass of shorter

marshes *Chrysoplenium alternifolium* in shade below Weensland. Surprisingly, Yellow Iris *Iris pseudacorus* is known only on the Slitrig near St Cuthbert's Church. Spear Mint *Mentha spicata* and Peppermint *M. x piperta* grow in mud, Amphibious Bistort *Persicaria amphibia* also grows in mud from where it sometimes extends onto the water, while Common Valerian *Valeriana officinalis* favours seepages.



Pyrenean Valerian *Valeriana pyrenaica*

damp grassland, is only known just upstream of the Cauld by the High School.



Giant Bellflower *Campanula latifolia*

Rocky places are favoured by Giant Bellflower *Campanula latifolia* (see map, intensively recorded) at the head of Wilton Lodge Park and below Mansfield, by Wild Basil *Clinopodium vulgare* at Parkdail, by Marsh Hawk's-beard *Crepis palustris* at the head of Wilton Lodge Park and by Meadow Saxifrage *Saxifraga granulata* in one place below Mansfield.

Campanula latifolia (Giant Bellflower)



The banks are often built up from sandy alluvium but vary in their moisture retention. Open stretches of the vegetation are largely made up of a few coarse grasses, False Oat-grass *Arrhenatherum elatius*, and Cock's-foot *Dactylis glomerata*, with Tufted Hair-grass *Deschampsia* and Yorkshire-fog *Holcus lanatus cespitosus* together with Common Nettle *Urtica dioica* in varying abundance. Where they dominate, these species crowd out all but the most robust herbs. Nevertheless the wide range of microhabitats allows a very diverse flora. Tuberous Comfrey *Symphytum tuberosum* (see map, selectively recorded) is plentiful while Russian Comfrey *S. x uplandicum* (see map, selectively recorded) is more local. Rev J Duncan knew the former as a Roxburghshire rarity in the 1860's, though not from the Teviot, and did

Symphytum tuberosum (Tuberous Comfrey)





Tuberos Comfrey *Symphytum tuberosum*



occasionally with its second parent Imperforate St John's-wort *H. maculatum*. Field Scabious *Knautia arvensis* has a fine colony by the Cauld near the High School but is scarce elsewhere. Rough Hawkbit *Leontodon hispidus* grows with the Scabious by the Cauld and in a few other places while Oxeye Daisy *Lecantheum vulgare* is more frequent. One plant of

not record the latter. Modest patches of Common Michaelmas-daisy *Aster novi-belgii* were found by Wilton Lodge Park and below Mansfield, Fuchsia *Fuchsia magellanica* on the north bank just upstream of the Cauld, Meadow Crane's-bill *Geranium pratense* is widespread while Wood Crane's-bill *G. sylvaticum* is found by Wilton Lodge Park where there is also a patch of the pink-flowered Druce's Crane's-bill *G. x oxonianum*, which is a popular garden plant. The St John's-worts are well represented. Hairy St John's-wort *Hypericum hirsutum* is quite scarce while Perforate St John's-wort *H. perforatum* is frequent on dry banks with Hybrid St John's-wort *H. x desetangsii* a little less frequent in marginally more shady habitats,



Russian Comfrey *Symphytum x uplandicum*

Martagon Lily *Lilium martagon* was found below Mansfield while a self-sown plant of Wilson's Honeysuckle *Lonicera nitida* was found on a river bank in the Wilton Lodge Park. Marjoram *Origanum vulgare* has several colonies below Mansfield where Green Alkanet *Pentaglottis sempervirens* is also found. Bistort



Field Scabious *Knautia arvensis*

Persicaria bistorta has a sizeable colony below Weensland. The old dye plant Weld *Reseda luteola*, which Sir James A H Murray knew by 'waysides' in the 1860's, grows next to Lovat Mill, while Yellow-rattle *Rhinanthus minor* is pleasingly frequent in a variety of situations.

The banks below Weenland Mill have seen some dumping and here grow Dotted Loosetrife *Lysimachia punctata*, Grass-leaved Golden-rod *Solidago graminifolia* and Steeple-bush *Spiraea douglasii* subsp. *douglasii* (the similar subsp. *menzeisii* was found in a hedge at Burnfoot). There is a great tangle of Bramble *Rubus fruticosus* agg. where the millstream joins the Teviot. Goat's-beard *Tragopogon pratensis* was found in a few places below Mansfield, while Zig-zag

Clover *Trifolium medium*, more a plant of open grassland, is scarce by the river.

Dark Mullein *Verbascum nigrum* grows behind Lovat Mill alongside its hybrid with Great Mullein *V. x semialbum*. The Latin name 'half-white' refers not to the petal colour, which is yellow in both parents, but bizarrely to the hairs on the filaments (stalks) of the anthers, of which half are white as in Great Mullein and half are purple as in Dark Mullein.

The shingle banks and islands in the Teviot are a rich hunting-ground for plants, some of which are little more than casuals. A few plants of Wild Basil *Clinopodium vulgare* were found on the island below Mansfield which has the most diverse flora. Here also was one plant of a cultivar of Bushy Mint *Mentha x gracilis* with variegated leaves and a small but strong colony of Water Chickweed *Myosoton aquaticum*, which was also found by the island below the Common Haugh. Water Chickweed looks rather like Wood Stichwort *Stellaria nemorum* but flowers in the late summer, not in the spring, and is a rarity in

Scotland. It is unclear where it might have come from, though there are a few colonies by the lower Tweed. Plants of the shingle and mud include fair numbers of Sunflower *Helianthus annuus*, doubtless spread from bird-tables, and Tomato *Solanum lycopersicum* whose seeds are almost indestructible and can be carried far and wide. There is frequent Monkey-flower *Mimulus guttatus* with just one occurrence of Hybrid Monkey-flower *M. x robertsii* with large red spots on the yellow flowers. There are two species of Water-cress, the locally common Narrow-fruited Water-cress *Nasturtium microphyllum* and just one colony of Broad-fruited Water-cress *N. officinale*, which is the common species in England. The two Yellow-cresses *Rorippa palustris* and *R. sylvestris* are both fairly frequent in the lower stretches of the Teviot, especially the latter.

The riverside trees and shrubs include many willows, which make an interesting study. Much the most plentiful species is Purple Willow *Salix purpurea* (see map, selectively recorded), which is a rather local species in Britain though it has sometimes been planted for basket work. It is very varied in the shape of its leaves which are usually, but not always, held in opposite pairs, unlike most willows. Goat Willow *S. caprea*, which grows very readily from seed, is much more frequent than Rusty Willow *S. cinerea* subsp. *oleifolia*. Two quite specialised willows were found on islands and rocks by Wilton Lodge Park: Bay Willow *S. pentandra* and Tea-leaved Willow *S. phylicifolia*. Planted willows, that also spread where broken shoots take root, are Osier *S. viminalis* and Hybrid Crack Willow *S. x fragilis sens. lat.*, of which two forms are present. There is a

Salix purpurea (Purple Willow)



fine planted specimen of White Willow *Salix alba* just upstream of the Cauld. Several Weeping Willow *S. x sepulcralis* nothovar. *chrysocoma* have been planted below Mansfield and there are other hybrid willow introductions in several places. Two poplars have been planted, Western Balsam-poplar *Populus trichocarpa* and Hybrid Black-poplar *P. x canadensis*, while Alder *Alnus glutinosa* is quite frequent and sometimes self-sown.

Rather surprisingly there are almost no aquatic plants in the river itself, possibly because so much of the river bed is of gravel that is constantly shifting. However there are two colonies of Stream Water-crowfoot *Ranunculus pencillatus* below Mansfield where there are shelves of rock in the river.



Meadow Crane's-bill *Geranium pratense*



Stirches Burn

The Stirches Burn is largely canalised and free from adjacent marsh. The stretch by the Stirches housing has Water-cress *Nasturtium officinale* agg. and Hairy Sedge *Carex hirta*. To the east it runs through a small dean below the site of the old Wilton Manse where Lesser Periwinkle *Vinca minor* is extensively naturalised. It continues south to the River Teviot in an underground culvert.

Boonraw Burn

The banks of the section of the Boonraw Burn in the survey area are wooded and their botanical interest has been described above under Burnhead to Bucklands.

Meadow Crane's-bill was intensively recorded. It is mentioned above under the Teviot (page 39) and in the grassland section under The Motte

5. Parks and cemeteries

Wilton Lodge Park and walled garden

The principal botanical features of the park are the trees, the shrubberies and the mown grass, all set off by the River Teviot. The herbaceous botanical interest occurs along the river banks and the burnside at the foot of Dean Burn, along the steep bank by the drive from the Museum to the Common Haugh and on the banks behind the haugh grassland upstream of the Museum. The trees and riversides have already been described.

The steep bank by the drive from the Museum to the Common Haugh is home to two interesting naturalised introductions. There are two patches of Bistort *Persicaria bistorta* above the drive. They could have been present at the river's edge as ancient introductions before the drive was constructed and have reached their present position during the construction work, or they could have been deliberately introduced at that time. This is a herb with culinary and medicinal uses.

The other notable introduction is Spurge Laurel *Daphne laureola*, a very early-flowering small shrub which is present in reasonable numbers both above and below the drive, where it suffers periodic culling by the gardeners. The bank is colourful in the early spring where the native Primroses *Primula vulgaris* are accompanied by red-flowered varieties and hybrid intermediates. The planted Crocuses, *Crocus tommasinianus* and *C. vernus*, are barely naturalised. Towards the Museum much of the bank is carpeted by Irish Ivy *Hedera 'Hibernica'* but there is also a mauve-flowered form of Lesser Periwinkle *Vinca minor*.



Lords-and-ladies *Arum maculatum*

The foot of the Dean Burn has good colonies of Hard Shield-fern *Polystichum aculeatum* while the woodland nearby has the form of Lords-and-ladies *Arum maculatum* with unspotted leaves.

The most remarkable plant in the park is Toothwort *Lathraea squamaria*. It is a root-parasite without green parts that is not at all a common plant, but it is plentiful in the park where it flowers in early April. It is found in dense colonies near the foot of trees and shrubs and is remarkably catholic in its choice of host. The favourite host species are Gean, Cherry Laurel and Yew, but Sycamore, Beech, Lawson's Cypress and Rhododendron are also colonised.

The banks behind the haugh grassland upstream of the Museum have the remnants of a woodland and grassland flora. Goldilocks Buttercup *Ranunculus auricomus* is surprisingly frequent and there is a little Bulbous Buttercup *R. bulbosus*. Heath Speedwell *Veronica officinalis* is present in a form that has almost white flowers with violet veins.



Lawn Lobelia *Pratia angulata*

The close-mown grass in front of the Museum and on the putting green is home to a striking colony of Lawn Lobelia *Pratia angulata*, an introduction from New Zealand almost certainly purchased as a rock garden plant from Forbes' Nurseries. It has an extraordinary ability to flower freely in mid-summer despite the mowing, its white flowers being held horizontally at ground level. It is absent from the areas of grass that are mown less closely. Slender Speedwell *Veronica filiformis* is another introduction that colonises mown grass. It used to put on a fine show of pale blue flowers in the spring, but here, as elsewhere in the Scottish Borders, it has become progressively less vigorous for unknown reasons and is no longer conspicuous.

The flower beds in front of the Museum have, as a weed, a small colony of Hybrid Woundwort *Stachys x ambigua*. Although both parents are present not far away this is likely to have been a deliberate introduction. It has attractive red flowers and is useful as a cut flower as its infertile flowers do not drop off when kept in a vase, unlike those of its parents.



Slender Speedwell *Veronica filiformis*

The Walled Garden is wonderfully maintained, but, despite the best endeavours of the gardeners, a few exotic weeds survive precariously. One of the most interesting is American Speedwell *Veronica peregrina*, a small, inconspicuous upright annual found in cracks in the path by the pond and also in a bed to the east of the entrance. It has a penchant for walled gardens, such as that at Newton Don near Kelso where it has been known since 1873. A much more recent incomer in small quantity is New Zealand Bitter-cress *Cardamine corymbosa* which has been spread around in the last two decades by rock garden enthusiasts, as it colonises the gritty soil used in plant pots. Its white flowers can form an attractive carpet in spring but the later flowering is on taller stems that look

scruffy as the flowers do not open, but they set plenty of seed. Scarlet Pimpernel *Anagalis arvensis* and Wall Whitlowgrass *Draba muralis* are other uncommon weeds. The Scarlet Pimpernel could have come from anywhere, but I once met a Hawick man out walking who confided in me that he grew the plant in his garden and collected the seed which he then took in his pocket and scattered where fancy suggested. The yellow-flowered Least Yellow-sorrel *Oxalis exilis* is a mat-forming greenhouse weed. In 2014 the plants cultivated in the small pond included such native species as Common Cottongrass *Eriophorum angustifolium*, Water Mint *Mentha aquatica*, Bogbean *Menyanthes trifoliata* and Great Spearwort *Ranunculus lingua*. Sadly there is an infestation of New Zealand Pigmyweed *Crassula helmsii*, an invasive alien, which is likely to have been introduced unintentionally along with the innocuous Common Duckweed *Lemna minor*. A bed had been planted as a tall-herb habitat patch that included Reed Canary-grass *Phalaris arundinacea* and White Champion *Silene latifolia*. White Champion is now a rarity in the town and was only seen elsewhere on a building site next to the Community Hospital, though Sir James A H Murray knew it in 'slaty barren fields around Hawick' in the 1860's. Bittersweet *Solanum dulcamara* climbs in the hedge at the entrance to the garden.

Burnfoot

The Burnfoot housing estate boasts wide open spaces, especially down to the Boonraw Burn to the east but their botanical interest is very modest. The woodland by the burn and the planted trees have been referred to above and the more diverse grassland areas are discussed below. Most of the grassland is reseeded grass, mainly of Perennial Rye-grass *Lolium perenne*, that is mown regularly with the mowings being left as a mulch. The result is a eutrophic sward that is very species-poor. A short section of the Boonraw Burn runs through the mown grass, but it is reduced to a canalised channel with vertical banks and only modest botanical diversity. A bank nearby which is the result of re-engineering following clearance of the old railway bankings has provided habitat for Rough Hawkbit *Leontodon hispidus*, Fairy Flax *Linum catharticum* and Common Bird's-foot-trefoil *Lotus corniculatus*.

Wellogate Cemetery

Wellogate Cemetery is most notable for its trees. Some of these have been discussed above, but the evergreens include much Lawson's Cypress with Sawara Cypress *Chamaecyparis pisifera*, both Common Holly *Ilex aquifolium* and the spineless hybrid *I. x altaclerensis* with Irish Yew *Taxus baccata forma fasciculata*, Cherry Laurel, Portuguese Laurel and Rhododendron. The deciduous trees include Horse Chestnut, Hornbeam, Gean and Lime. Shrubs include Buddleja *Buddleja davidii* naturalised on walls and at the foot of walls, as outliers from the huge colony in the yard of the former Turnbull's dyeworks nearby. Himalayan Cotoneaster *Cotoneaster simonsii*, with its upright growth form, is also naturalised with Flowering Currant *Ribes sanguineum* and Laburnum *Laburnum anagyroides*.

There is Ivy-leaved Toadflax *Cymbalaria muralis* on the walls with Purple Toadflax *Linaria purpurea* but not much in the way of ferns. Only one of the

Hyacynthoides x massartiana (Garden Bluebell)



walls has Wall-rue *Asplenium ruta-muraria* and there is even less Maidenhair Spleenwort *A. trichomanes subsp. quadrivalens*. Hard Fern *Blechnum spicant* is a rather surprising colonist in two places on the wooded bank. It has not been found anywhere else in the town.

Spring-flowering bulbs include both the normal and double-flowered forms of Snowdrop

Galanthus nivalis and the Garden Bluebell *Hyacinthoides x massartiana* (see map, selectively recorded).

The grassland contains elements of former meadow and the more heathy grassland found in the fields above the town. Pignut *Conopodium majus* and Bulbous Buttercup *Ranunculus bulbosus* are relicts of the former while Heath Bedstraw *Galium saxatile* is evidence of the latter. The wooded bank includes native woodland species like Wood Meadow-grass *Poa nemoralis*, Goldilocks Buttercup *Ranunculus auricomus* and Common Figwort *Scrophularia nodosa* along with introductions including White Woodrush *Luzula luzuloides* and London-pride *Saxifraga x urbium*, both typical Victorian plantings.



Garden Bluebell *Hyacinthoides x massartiana*

Whitlowgrass *Erophila verna* has colonised the paths and the base of walls.

Wilton Cemetery

Wilton Cemetery is less varied than Wellogate Cemetery but has many of the same trees and shrubs, including the Cypresses. The beech are prominent and include Copper Beech *Fagus sylvatica* var. *purpurea*. There is a prominent example of the weeping form of ash *Fraxinus excelsior* 'Pendula' and some fine silver birches. The hollies include variegated forms while Oregon-grape *Mahonia aquifolium* is more or less naturalised.

The walls have large colonies of Wall-rue *Asplenium ruta-muraria*.

Like Wellogate Cemetery the grassland has elements of a natural meadow with Pignut *Conopodium majus*, Rough Hawkbit *Leontodon hispidus*, Ox-eye Daisy *Leucanthemum vulgare*, Black Medick *Medicago lupulina* and Bulbous

The flora of Hawick Burgh

Buttercup *Ranunculus bulbosus*. The paths and the bare ground by the gravestones are home to a number of annuals including three uncommon Speedwell species: Green Field-speedwell *Veronica agrestis*, American Speedwell *V. peregrina* and Grey Field-speedwell *V. polita*.

The Snowdrops *Galanthus nivalis* and Garden Bluebell *Hyacinthoides x massartiana* have been joined by the beginning of what is likely to become a major invasion by Few-flowered Garlic *Allium paradoxum*. Much more acceptable incomers are Garden Lady's-mantle *Alchemilla mollis*, Pink Purslane *Claytonia sibirica* and an orange-flowered form of Welsh Poppy *Mecanopsis cambrica*.

The Motte

The Motte is set in reseeded grass which is very species-poor but the steep sides of the mound itself provide a refuge for a grassland flora that gives a good indication of what would have been found in a wider area nearby in the past, bearing in mind that as late as 1900 there were arable fields where much of the adjacent housing now stands. Species present include Yarrow *Achillea millefolium*, Intermediate Lady's-mantle *Alchemilla xanthochlora*, Cuckooflower *Cardamine pratensis*, Common Knapweed *Centaurea nigra* (see

Centaurea nigra (Common Knapweed)



map, selectively recorded), Meadow Crane's-bill *Geranium pratense*, Field Scabious *Knautia arvensis*, Burnet-saxifrage *Pimpinella saxifraga*, Barren Strawberry *Potentilla sterilis* and Zig-zag Clover *Trifolium medium*. These are accompanied by an unidentified dog-rose and, rather surprisingly, by Imperforate St John's-wort *Hypericum maculatum*, which is something of a speciality of the town.

6. Grassland

Miller's Knowes and nearby fields

While the parks and cemeteries have vestiges of the former grassland flora of the area around the town there are much better-preserved examples out by the



Hawick from the Miller's Knowes 2014

Miller's Knowes. The Miller's Knowes itself is managed as a public park. It is currently ungrazed with broad mown paths leaving large areas of long grass with a little scrub. There is a small disused skate-board area at the top. This management is not helpful to a flora that has developed over centuries of grazing and some species have retreated to a few small rocky knowes.

The grasses that dominate these hill grasslands are Common Bent *Agrostis capillaris* and two fescues, Sheep's-fescue *Festuca ovina* and Red Fescue *F. rubra*. Herbs that accompany them on the thinnest soils are Harebell *Campanula rotundifolia*, Heath Bedstraw *Galium saxatile*, Tormentil *Potentilla erecta* and Wild Thyme *Thymus polytrichus*. On richer pockets of soil at the Miller's Knowes there are Lady's Bedstraw *Galium verum* (see map, selectively recorded), Burnet-saxifrage *Pimpinella saxifraga*, a little Field Scabious *Knautia arvensis* and Bulbous Buttercup *Ranunculus bulbosus*. The Burnet-saxifrage copes well with the longer grass. Amazingly one good clump of Heather *Calluna vulgaris* survives here. On a bank by the skate-board area there is a colony of an Eyebright *Euphrasia arctica* subsp. *borealis*.

Galium verum (Lady's Bedstraw)



Across the Easter Braid Road there is a small paddock currently grazed by horses. This has a very much richer flora of which the highlight is Common Rockrose *Helianthemum nummularium* in fair quantity. Here there is no Heather but there is a little Blaeberry *Vaccinium myrtillus*. There are some delicate grasses. Silver Hair-grass *Aira caryophyllea*, Early Hair-grass *A. praecox*, Meadow oat-grass *Avenula pratensis* and Yellow Oat-grass *Trisetum*

flavescens grow with Spring Sedge *Carex caryophyllea* and Field Wood-rush *Luzula campestris*. Herbs include Pignut *Conopodium majus*, Slender St John's-wort *Hypericum pulcrum*, Bitter-vetch *Lathyrus linifolius*, Common Bird's-foot-trefoil *Lotus corniculatus*, Zig-zag Clover *Trifolium medium* and Narrow-leaved Vetch *Vicia sativa subsp. nigra*. The roadside has some good colonies of Wood Crane's-bill *Geranium sylvaticum* near some Wych Elm *Ulmus glabra* while Garden Solomon's-seal *Polygonatum x hybridum* has been dumped nearby and is well-established.

Hardie's Hill

Southwest of Wellogate Cemetery and above the old railway are three further fields with old grass, though those at Hardie's Hill itself are much colonised by whins *Ulex europaeus*. The more widespread species are the same as at the Miller's Knowes. Bulbous Buttercup *Ranunculus bulbosus* is surprisingly plentiful in the damper parts while Smooth Hawk's-beard *Crepis capillaris* is abundant on the knowes and in poached areas. The rocky knowes are quite extensive but not as calcareous as those in the paddock across from the Miller's Knowes. Here grow the grasses and sedge known from that paddock, Silver Hair-grass, Early Hair-grass, Yellow Oat-grass and Spring Sedge, but now joined by Quaking Grass *Briza media*, Small Cat's-tail *Phleum bertolonii* and Spreading Meadow-grass *Poa humilis*. Also on the knowes are Common Lady's-mantle *Alchemilla filicaulis subsp. vestita*, Slender Parsley-piert *Aphanes australis*, Thyme-leaved Sandwort *Arenaria serpyllifolia*, Little mouse-ear *Cerastium semidecandrum*, Whitlowgrass *Erophilla verna sens. lat.*, Fairy Flax *Linum catharticum* and Zig-zag Clover *Trifolium medium*. The slopes have small colonies of Common Spotted-orchid *Dactylorhiza fuchsii* and Devil's-bit Scabious *Succisa pratensis*.

Other grassland

There is a further area of hill grassland by Heronhill Pond. This is similar to that at Hardie's Hill but not so species-rich, as some of it is reseeded. Nearby a reseeded field margin has a large colony of Yellow-rattle *Rhinanthus minor* which was probably included in the sown seed-mix. The fields above the A698 between Mansfield House Hotel and Haughhead House also have old grass, but it too is not very species-rich though there are some areas of scrub that add diversity. The fields between the Stirches housing estate and Galalaw have dense whins on the banks with some Broom *Cytisus scoparius* and such species as Foxglove *Digitalis purpurea*, while the open grassland above is not very notable.

A fascination of an urban area is the considerable number of small pockets of grassland that harbour species of interest, many of them introductions. These include road verges and bankings. A damp paddock next to Whitlaw Wood has been poached by horses allowing a colony of Red Bartsia *Odontites vernus* to flourish. Common Blue-sow-thistle *Cicerbita macrophylla* is a throw-out found below the houses across the Slitrig from Whitlaw Wood with Mawson's Lungwort *Pulmonaria 'Mawson's Blue'* nearby. Sweet-briar *Rosa rubiginosa* is only known by a lane to fields near Wester Braid Road near where Hedge



Perennial Cornflower *Centaurea montana*

Crane's-bill *Geranium pyrenaicum*, an old introduction that Sir James A H Murray knew in a lane east of Wellogate in the 1860's, grows on rubble in a stable yard. All the Bindweeds are introductions to the town. Large Bindweed *Calystegia silvatica*, in a hedge by the Wester Braid Road, is a more recent introduction than the widespread Hedge Bindweed *C. sepium* with which it grows. The Easter Braid Road has a shaded verge where Honesty *Lunaria annua* has colonised in both purple and white-flowered forms together with a large colony of the winter-green perennial Green Alkanet *Pentaglottis sempervirens*. Melancholy Thistle *Cirsium heterophyllum* is a relatively scarce native species that survives on the roadside not far from

Heronhill Pond while Wall Lettuce *Mycelis muralis* grows under trees not far away.

There are fewer isolated patches of natural grassland north of the Teviot. The form of Lords-and-ladies *Arum maculatum* with unspotted leaves grows under a hedge back from the river at Mansfield. A small area of damp grassland just below the Burnfoot industrial estate with Common Rush *Juncus effusus* and Hard Rush *J. inflexus* is host to a large colony of Northern Marsh-orchid *Dactylorhiza purpurella*. The Few-flowered Garlic *Allium paradoxum* that has become so abundant by the Teviot is on the march in other places, as at the western edge of the Burnfoot housing estate above the A7 trunk road. The mown grass hollow just north of the Fire Station is the site of former wetland associated with the Stirches Burn and amazingly still has a few unexpected wetland plants including Bristle Club-rush *Isolepis setacea* and Ragged Robin *Silene flos-cuculi*. Autumn Crocus *Crocus nudiflorus* grows in large naturalised patches under trees on a bank near the site of old Wilton Manse with a little Wall Lettuce *Mycelis muralis*.

A modest colony of Blue Anemone *Anemone apennina* flowers here in the spring. An introduction that is becoming widespread in the town and even a local nuisance is the orange-flowered hawkweed Fox-and-cubs *Pilosella aurantiaca* subsp. *carpathicola*. It is abundant on a bank by the road to Stirches by Wilton School which has an unexpected colony of Prickly Sedge *Carex muricata* subsp. *pairae*. Perennial Cornflower *Centaurea montana*, Leopard's-bane *Doronicum pardalianches* and Oriental Poppy *Papaver pseudoorientale* are garden throw-outs that have formed patches in several places, as in the Stirches housing where Lesser Knotweed *Persicaria campanulata* is a less common introduction.



Leopard's-bane *Doronicum pardalianches*

7. Ponds and wetland

Heronhill Pond

Although Hawick has rivers and burn there is extremely little in the way of ponds and wetland. There will have once been wetland on the haughs, but this has long been drained. Heronhill pond is the best on offer. It has a dam and is likely to have been a former mire. It is lined with planted trees except at the west end which is open to grazing. The trees include White Willow *Salix alba*, Osier *S. viminalis*, Aspen *Populus tremula* and Western Balsam-poplar *P. trichocarpa*. The Aspen has been recently introduced during work carried out by the Borders Forest Trust. There is no woodland flora as such except for the most unexpected



Duckweeds *Lemna* spp.

occurrence of Goldilocks Buttercup *Ranunculus auricomus* under sycamore, where it may be a recent colonist. The margins of the pond have much Water Horsetail *Equisetum fluviatile* and Common Spike-rush *Eleocharis palustris* with Branched Bur-reed *Sparganium erectum* and a little of the elegant Water-plantain *Alisma plantago-aquatica*. The rushes include Hard Rush *Juncus inflexus*. In a mire area at the east end grow Whorled Mint *Mentha x verticillata* and Hybrid Water-cress *Nasturtium x sterile* with Common Valerian *Valeriana officinalis*. Amphibious Bistort *Persicaria amphibia* spreads out from the margins over the open water where there is White Water-lily *Nymphaea alba* and two pondweeds, Small Pondweed *Potamogeton berchtoldii* and Broad-leaved Pondweed *P. natans* with Canadian Waterweed *Elodea canadensis*. The edge of the open water has two Duckweeds, Common Duckweed *Lemna minor* and the scarce Ivy-leaved Duckweed *L. trisulca*.

Burnfoot mire

At the junction between the A7 trunk road and the road to Lilliesleaf there is a small mire. This was a more significant feature until relatively recent drainage works and I remember a good show of Marsh Marigold *Caltha palustris* there in the spring, but this plant is no longer present (though it is still found by the river). There are several rush species including Compact Rush *Juncus conglomeratus*, Sharp-flowered Rush *J. acutiflorus* and its hybrid with Jointed Rush, *J. x surrejanus*. The sedges are Lesser Pond-sedge *Carex acutiformis*, Brown Sedge *C. disticha* and Oval Sedge *C. leporina*. To enliven this assemblage there is a colony of Common Spotted-orchid *Dactylorhiza fuchsii* at the margin of the mire.



Marsh Marigold *Caltha palustris*



**Common Spotted-orchid
*Dactylorhiza fuchsii***

8. Cultivated ground

Allotment gardens

The best places to find the former arable weeds of the town are in the allotment gardens at Wester Braid Road, in The Village near St Cuthbert's Church, by Weensland Mill and by the road to Wilton Dean.

The allotments at Wester Braid Road suffer from a severe infestation of Field Horsetail *Equisetum arvense* but some are very productively cultivated. The weed flora is varied with Fumitories particularly well represented including the two subspecies of Common Fumitory, *Fumaria officinalis* subsp. *officinalis* and the fewer-flowered subsp. *wirtgenii*. These are accompanied by a Hawick speciality, Purple Ramping-fumitory *F. purpurea*, first found by Sir James A H Murray, which belies its name by having largely white flowers. It is a very local British endemic that is found in a number of places not far from the town including our own garden at Clarilaw and the adjacent fields. Another Hawick speciality, Yellow-juiced Poppy *Papaver lecoqii*, is also present with Long-headed Poppy *P. dubium*, but the Common Poppy *P. rhoeas* was only found where a large-flowered variety had been sown as part of a youth group project with Corn Marigold *Glebionis segetum*. The terrestrial form of Amphibious Bistort *Persicaria amphibia* grows at the edge of the cultivated area. Other weeds are Wall Whitlowgrass *Draba muralis*, an uncommon species that has a good colony on a wall by the allotments but also occurs among the vegetables with Green Field-speedwell *Veronica agrestis*. Borage *Borago officinalis* will have been cultivated in the recent past but is now established as an attractive weed.

The small vegetable gardens in The Village across the Slitrig from St Cuthbert's Church have two Spurges: Sun Spurge *Euphorbia helioscopia*, usually found in arable fields, and Petty Spurge *Euphorbia peplus* which is a garden specialist. This is another locality for Green Field-speedwell *Veronica agrestis*. Nasturtium *Tropaeolum majus* has more or less naturalised in a sheltered corner.

The Weensland allotments are well maintained and not very rich in weeds. Sun Spurge *Euphorbia helioscopia*, Petty Spurge *Euphorbia peplus* and Green Field-speedwell *Veronica agrestis* occur again with Yellow-juiced Poppy *Papaver lecoqii* and Small Nettle *Urtica urens*.

Many of the Wilton allotments have been neglected and Field Horsetail *Equisetum arvense* is a problem here too. Introductions that have established

include Teasel *Dipsacus fullonum* and the very uncommon blue-flowered Rough Comfrey *Symphytum asperum* near the entrance gate.

Other gardens

No attempt was made to intrude on the privacy of most of the town's gardens. However Pale Toadflax *Linaria repens*, which is a creeping perennial as its name suggests, was seen to be rife in several gardens at Wilton Dean and again in The Terraces not far to the east of Wellogate cemetery. The non-toxic garden form of Opium Poppy *Papaver somniferum* is surprisingly rare but was noted in The Terraces. One of the shaded drives to houses at Sunnyhill has two clumps of Broad-leaved Meadow-grass *Poa chaixii*. This is an attractive species for growing under trees which was fashionable for a time in the Victorian era. A herbaceous border in a house at Sunnyhill had, as a weed, Water Figwort *Scrophularia auriculata*. This was an unintentional introduction of a curious tall variety growing to 150cm that my wife and I saw in a garden in Denholm in 2007 and which I have also seen in Berwickshire and Ireland, always on much drier ground than is normal for the species. It is presumably spreading through the horticultural trade.

Arable fields

To my surprise I found that there was one small arable field within the survey area in 2014. This was a field of oats *Avena sativa* at Galalaw. It had an unusual assemblage of grass weeds: Barren Brome *Anisantha sterilis*, Soft-brome *Bromus hordeaceus*, the rare Rye Brome *Bromus secalinus* and Italian Ryegrass *Lolium multiflorum*, the last presumably being a survival from a former sowing. The damp field margins held a colony of Red Bartsia *Odontites vernus*.

Arable weeds as casuals

One of the advantages of making such a detailed survey of an area is that one learns more about the habitats of individual species, and arable weeds are a case in point. Several such weeds were only found in the town as casuals at the riverside. The widespread Common Ramping-fumitory *Fumaria muralis* subsp. *boraiei* was not found in the allotment gardens with other fumitories but was seen on an island in the Teviot by Wilton Lodge Park. Large-flowered Hemp-nettle *Galeopsis speciosa* was found by the Slitrig below Hardie's Hill while Pale Persicaria *Persicaria lapathifolium* was found on mud by the Teviot by the Common Haugh and again at Mansfield where it was accompanied by Corn Spurrey *Spergula arvensis*. Field Pansy *Viola arvensis* was only seen as a casual in the Burnfoot industrial estate.

9. Roads and railways

A7 trunk road

Spergularia marina (Lesser Sea-spurrey)



Since 1992 there has been a remarkable colonisation of the roads of the Scottish Borders by a group of salt-tolerant maritime plants that have taken advantage of die-back at the edges of the main roads where the vegetation is affected by the build-up of salt from winter gritting. They are all annuals. The first to arrive were Reflexed Saltmarsh-grass *Puccinellia distans* and Lesser Sea-spurrey *Spergularia marina* (see map, selectively recorded) which came north by various routes including the A68 over Carter Bar. These were soon followed by Spear-leaved Orache *Atriplex prostrata*. More recent arrivals are the diminutive Sea Pearlwort *Sagina maritima* and Danish Scurvy-grass *Cochlearia danica*. The last has taken a surprisingly long time to colonise the Scottish Borders. In England it was the first of this group of species to draw attention to itself by flowering profusely in the central reservation of motorways where it likes the gritty substrate. Eventually it colonised north to Edinburgh on the A1 and has only recently colonised south from there down the A68 and the A7 reaching Hawick in 2006. All these species are now found by the A7 within the survey area. They are not found where there are pavements next to the road surface and are very scarce where there is a



Reflexed Saltmarsh-grass
Puccinellia distans (dark line at roadside) and Lesser Sea-spurrey *Spergularia marina* (yellow) by A7 at Groundistone 2011

concrete kerb, so the main colonies are between the Galalaw roundabout and the Fire Station and again by Parkdail to the southwest of the town centre.

Another plant to colonise roads in the 1990's was Northern Dock *Rumex longifolius*. This came in from the north and colonised parts of the road verge well back from the carriageway. Its spread does not seem to have been salt-related. In the last few years this dock has declined as mysteriously as it arrived. A few plants were noted in a paddock close to the A7 just south of Galalaw in 2014.

When the A7 by Burnfoot was realigned some years ago a rock face was exposed on the east side where there is water seepage that can give rise to spectacular icicles in winter. The rock has been colonised by a variety of plants that include

Wall Cotoneaster *Cotoneaster horizontalis* and two stonecrops: White Stonecrop *Sedum album* and Reflexed Stonecrop *S. rupestre*. Both are introductions, but are self-sown at this site. On the verge at the foot of the rock is a colony of Field Scabious *Knautia arvensis*, with Pink Purslane *Claytonia sibirica* not far away.



White Stonecrop *Sedum album*

The old railway

The section of the old railway in Whitlaw Wood has already been described. By the Slitrig at the site of the Six-arch Bridge over the Slitrig and the B6399 there is a small colony of Agrimony *Agrimonia eupatoria*. Bittersweet *Solanum dulcamara* flourishes along the wall by the road, drooping down from the bank above. This plant has several

localities in the town, and indeed it was recognised as one of Hawick's specialities by Rev J Duncan in the 1860's. Nearby, steps up the steep bank from the road lead to a spectacular rock cutting. At my suggestion, the steep bank was not reseeded when the viaduct was demolished in view of its botanical interest and it has indeed re-colonised naturally with an interesting mix of species including Imperforate St John's-wort *Hypericum maculatum*, Common

Restharrow *Ononis repens*, Wild Marjoram *Origanum vulgare* and Wood Sage *Teucrium scorodonia*, but Shasta Daisy *Leucanthemum x superbum* has somehow been introduced and has naturalised. Here I found just a single plant of Kidney Vetch *Anthyllis vulneraria* which used to be plentiful on this stretch of the old railway and supported a colony of the Small Blue butterfly *Cupido minimus*.



Scrub overhanging old railway ballast 2014

The cutting itself is very rich in ferns. The three most plentiful species are Hart's-tongue Fern *Asplenium scolopendrium*, Maidenhair Spleenwort *A. trichomanes*



Rustyback Fern *Asplenium ceterach*

subsp. quadrivalens and Polypody *Polypodium vulgare*. Hard Shield-fern *Polystichum aculeatum* is surprisingly scarce and there is very little Wall-rue *Asplenium rutamuraria*. The most interesting fern is Rustyback Fern *Asplenium ceterach*. There is just the one strong colony of twenty-six tufts. This fern is native in the west of Britain but not in our area. While it could have come in by spores being carried in the wind or on the trains it is rather likely to have colonised from Forbes' Nurseries nearby, where it

was cultivated for sale. Wild Onion *Allium vineale* grows on a rock ledge. There are orchids on the ballast floor of the rock cutting. One plant of Early-purple Orchid *Orchis mascula* was found there and, later in the year, a colony of Common Spotted-orchid *Dactylorhiza fuchsii*. Some of the railway ballast is wet and shady while other parts are dry and open, so the flora is varied with Harebell *Campanula rotundifolia*, Field Horsetail *Equisetum arvense*, Wild Strawberry *Fragaria vesca*, Wood Crane's-bill *Geranium sylvaticum*, Field Scabious *Knautia arvensis*, Oxeye Daisy *Leucanthemum vulgare*, Burnet-saxifrage *Pimpinella saxifraga* and Creeping Cinquefoil *Potentilla reptans*. The path along the railway winds its way through scrub and small trees, mainly blackthorn and silver birch.

To the east of the rock cutting in the more open ground grow London-pride *Saxifraga x urbium*, Zig-zag Clover *Trifolium medium* and one colony of Smooth Tare *Vicia tetrasperma*, which, unlike the common Hairy Tare *Vicia hirsuta*, has pale blue flowers and four small peas per pod rather than two. There is a strong colony of Common Blue-sow-thistle *Cicerbita macrophylla* on a bank where it is a throw-out from the houses nearby. As the old railway reaches the centre of the town above the site of the former Turnbull's dyeworks further introductions occur including the pink-flowered Hairy Bindweed *Calystegia pulcra* with Hedge Bindweed *C. sepium*, Waterer's Cotoneaster *Cotoneaster x watereri*, Garden Strawberry *Fragaria x ananassa* and Great Mullein *Verbascum thapsus*.

There is a steep grassy bank where the railway used to cross Weensland Road. Here there is still a small colony of the rayed form of Common Groundsel *Senecio vulgaris* var. *hibernicus*, which was once frequent around the town centre but is no longer so. It is thought to have been introduced with railway ballast.

The section of the old railway at the site of the old station and through Burnfoot has been extensively re-landscaped and the bankings have been reseeded and are kept mown. As a result they are now very species-poor. An improbable colony of Prickly Sedge *Carex muricata* subsp. *pairae* grows on a bank just above the mown area while Green Alkanet *Pentaglottis sempervirens* has colonised by the Leisure Centre, near where Rev J Duncan recorded it in the 1860's. The variegated garden form of Yellow Archangel *Lamiastrum galeobdolon* subsp. *argentatum* occurs as a naturalised throw-out near houses. Planted hawthorns include the hybrid *Crataegus x media* while other shrubs include Japanese Rose *Rosa rugosa*.

10. Urban habitats

Walls

Old walls in the town have quite a varied flora including a number of ferns. This was not always the case, when Sir James A H Murray was writing about ferns in 1863 there were hardly any wall ferns as the pollution from coal-burning inhibited them. Indeed Murray was so protective of the one colony of Wall-rue *Asplenium ruta-muraria* (see map, selectively recorded) that he knew that he

Asplenium ruta-muraria (Wall-rue)



refrained from recording where it grew, merely noting that it had recently been found ‘in considerable quantity in the vicinity of Hawick’ and thus not necessarily in the town itself. It is now quite a common wall fern with Maidenhair Spleenwort *A. trichomanes subsp. quadrivalens* and Hart’s-tongue Fern *Asplenium scolopendrium*, which was absent from the town in Murray’s time, though he knew it as an introduction at Ormiston and Rev J Duncan recorded it in Denholm Dean. The

delicate Brittle Bladder-fern *Cystopteris fragilis* occurs in several places as on walls by the post box at Wilton Dean, in The Terraces and in Weensland. Ivy-leaved Toadflax *Cymbalaria muralis* is a familiar wall plant, while its relative Italian Toadflax *C. pallida* which has larger flowers was found on, and at the foot of, a wall in The Terraces. Other wall plants include Fairy Foxglove *Erinus alpinus* at Wilton Dean and Sunnyhill and Shining Crane’s-bill *Geranium lucidum* in Wilton Dean and just off the Buccleuch Road. High walls sometimes have hawkweeds *Hieracium spp.* on the top, some of which are the alien *H. grandidens*. Yellow Corydalis *Pseudofumaria lutea* has spread along walls at Wilton Dean from where it has been introduced.

Pavements and parking areas

Pavements are usually kept more or less weed-free but are nevertheless home to a few specialist annuals. The two very similar early-flowering Whitlowgrasses *Erophila glabrescens* and *E. verna* set seed before the weedkiller takes effect and are quite widespread in the town and are especially plentiful on pavements in the Burnfoot industrial estate, while Annual Pearlwort *Sagina filicaulis* was found in the High Street. Pale Willowherb *Epilobium roseum* is a specialist of roadside gutters, in 2014 I found just the one plant outside Hamish Smith’s jewellers shop

but I have more often seen it in the Sandbed. Common Cornsalad *Valerianella locusta* is quite plentiful at the riverside pavement's-edge in Mansfield and in more modest quantity in the Wester Braid Road close to the 'fields near Wellogate' where Sir James A H Murray knew it in the 1860's as an arable weed, a habitat in which it is no longer found in the Scottish Borders. American Speedwell *Veronica peregrina* has a strong colony in Dickson Street near Wilton Church while Yellow-juiced Poppy *Papaver lecoqii* was found unexpectedly by a roadside lamppost in the Stirches housing estate.



Buddleja Buddleja davidii

perennials that produce much seed and can thus be available in the seed bank when such sites are opened up, as so much of this habitat is impermanent being dependent on development and redevelopment.

Buddleja *Buddleja davidii* (see map, selectively recorded) has become a notorious weed in cities and along railways in much of Britain. It colonises cracks in stone and brickwork and can cause much damage if left to itself. It has been slow to colonise Hawick despite being grown in gardens, where it has until recently been in favour as its flowers attract butterflies. It is now widespread in Hawick. There is a huge colony at the site of the former Turnbull's dyeworks in

I searched in vain for Enchanter's-nightshade *Circaea lutetiana* in Whitlaw Wood and the other woodlands in the survey area only to find a strong colony by the long steep steps that descend to the Teviot from Princes Street.

Parking areas are favourite dumping places for garden plants but their gravel can be a habitat in itself where Garden Lady's-mantle *Alchemilla mollis* and Purple Toadflax *Linaria purpurea* are typical colonists. A Michaelmas-daisy *Aster x salignus* in The Terraces was more obviously dumped.

Industrial sites

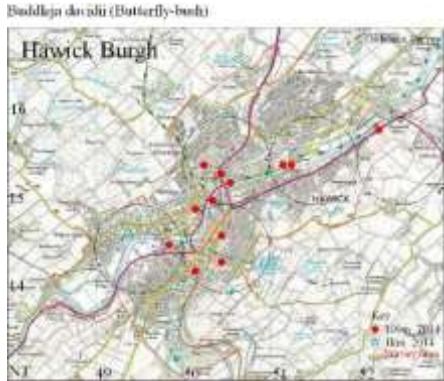
The rubble of building sites and yards in industrial areas can have quite a rich flora as it suits the many species which cannot cope with eutrophication and enjoy the absence of a grassy sward. Most of the species involved are annuals or short-lived

Urban habitats

Slitrig Crescent and it is present in varying quantity on all the industrial sites in the town. A particularly threatening plant was noted in the stonework of North Bridge.

Housing at Stonefield had been demolished in 2013 and a varied flora could be glimpsed through the security fencing in 2014. Poppies were prominent with both Long-headed Poppy *Papaver dubium* and Common Poppy *P. rhoeas*, but there was also a white-flowered variety of Musk

Mallow *Malva moschata*, Bittersweet *Solanum dulcamara* and a railway-ballast specialist Small Toadflax *Chaenorhinum minus*, that was not found elsewhere in 2014 but used to be plentiful on the railway.



Dark Mullein *Verbascum nigrum*

A building site next to the Community Hospital was very productive. Species recorded included Garden Lady's-mantle *Alchemilla mollis*, Slender Sandwort *Arenaria leptoclados*, Purple Toadflax *Linaria purpurea*, Dark Mullein *Verbascum nigrum* and two most unexpected comfrees: Caucasian Comfrey *Symphytum caucasicum* and Common Comfrey *S. officinale*. The latter, despite its name, had not been recorded before in Roxburghshire. It is a mystery where these two comfrees could have come from. Mugwort *Artemisia vulgaris* was seen here and in two places along Commercial Road. Not far away, next to the Burns Club, another building site had a large population of Rat's-tail Fescue *Vulpia myuros*.

A bank by the road behind the Lidl supermarket had been disturbed and this was the only place in town where Oxford Ragwort *Senecio squalidus* was found, this used to be plentiful at old Hawick station and along the railway ballast. Behind

The flora of Hawick Burgh

Lidl it was accompanied by Common Mallow *Malva sylvestris* and two small but striking plants of Sweet-William Catchfly *Silene armeria*.

There were a number of vacant sites and yards along the Mansfield road and these too had a diverse flora. One of the sites had a damp area where Square-stalked St John's-wort *Hypericum tetrapterum*, Red Bartsia *Odontites vernus* and Eared Willow *Salix aurita* were found. Drier sites had Perforate St John's-wort *Hypericum perforatum* with the hybrid *H. x desetangsii*, Large-flowered Evening-primrose *Oenothera glazoviana* and Great Mullein *Verbascum thapsus*.

The works to open up a new industrial site at Burnfoot had released some buried seed that seemed to relate to the old railway with Smith's Pepperwort *Lepidium heterophyllum* and a good colony of an Eyebright, either *Euphrasia nemorosa* or one of its hybrids. A sown wildflower mix had introduced a robust upright

variety of Bird's-foot-trefoil *Lotus corniculatus* var. *sativus*. A further site nearby had Montbretia *Crocsmia x crocosmiiflora*, which had been dumped, Sheep's Sorrel *Rumex acetosella*, probably a survival from the old railway, and was another locality for Great Mullein *Verbascum thapsus*.



Great Mullein *Verbascum thapsus*

The Weensland industrial estate was less productive with Annual Pearlwort *Sagina filicaulis* being the only species of note.

The Galalaw industrial estate has bankings where Cuckoo-flower *Cardamine pratensis* and Northern Marsh-orchid *Dactylorhiza purpurella* flourish with two Lady's-mantles *Alchemilla glabra* and *A. xanthochlora*.



Toothwort *Lathraea squamaria* D Moore

Front cover – *Hawick from Wilton* J B Pringle c 1854