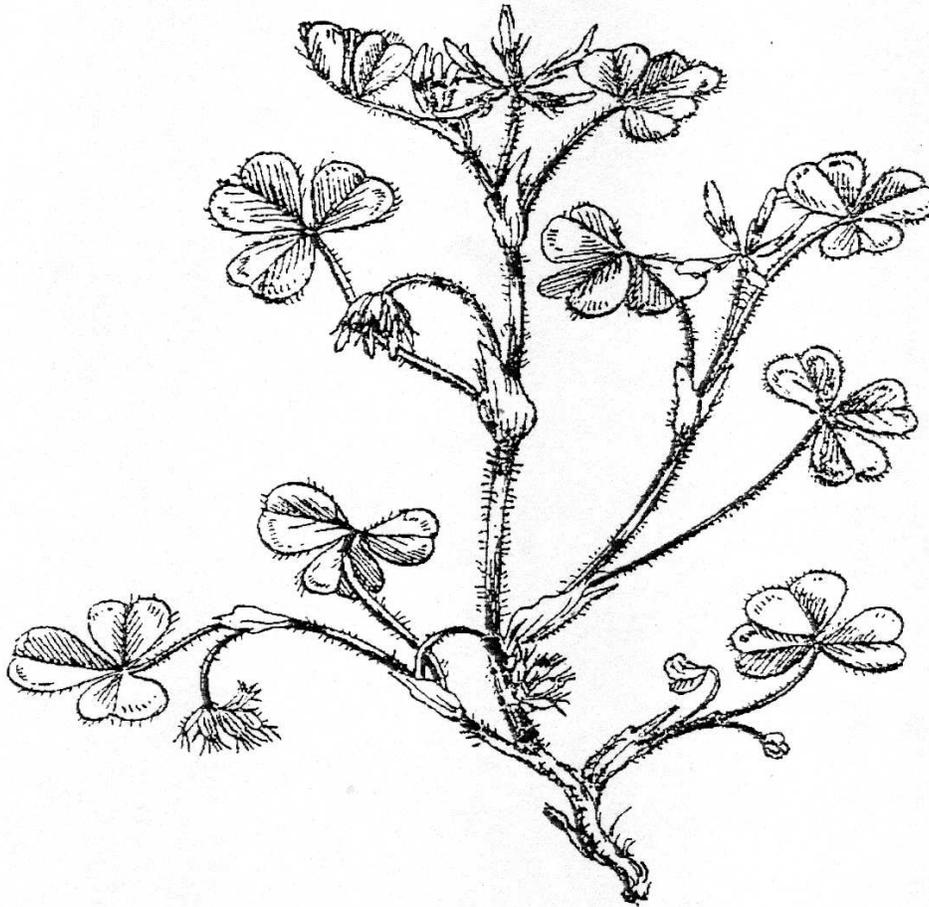


Parnassia

The Newsletter of the Liverpool Botanical Society



Subterranean Clover, *Trifolium subterraneum*

CONTENTS

New Flora for vc 59
Plants, People, Places
Mosslands
Rimrose Valley Orchids

July 1997

Editorial

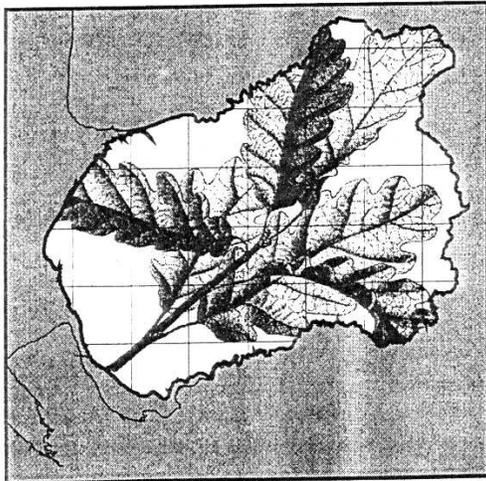
Welcome to the somewhat belated Summer 97 issue of *Parnassia* in which we are relying heavily on the notion 'better late than never'. This has been the consequence of major new undertakings on the part of both editors, however we are confident that 1998 will see a return to (relative) punctuality.

Thanks must go to Steve Cross and Paul Gutteridge for the supply of an article and letter respectively. While one of the reasons to initiating *Parnassia* was to allow for more lengthy field and evening meeting reports, it is also our intention to facilitate greater involvement from the wider membership by publishing information on areas of personal interest. Other options could include contributions to a 'notes and queries' section or 'local clippings' from magazines and journals if relevant to the north-west.

Donna and Mike

Local News

A New Flora for South Lancs.



On the 1st March the North West Naturalists Union held a meeting at Liverpool Museum to discuss a new flora for vc 59. The meeting was well attended (27) despite it clashing with the North West Fungus Group AGM. The aims of the morning were to clarify who was going to work on the flora, which taxonomic groups were to be included, and the format and time-scale the publication would take.

The last flora to be written, by Travis, was published in 1963 and over the 30 year period there have been new introductions, reductions, and also extinctions. The need for a new flora was clearly identified at the Mersey Basin Conference (see *Parnassia* Nov 1996).

A methodology of how to record needs to be established so that each tetrad is adequately served. A date needs to be set from which records can be taken from as it was noted that, because Newton's *Flora of Cheshire* has no reference date, people tended to use de Tabley's. This isn't to say that the history of a plant should not be included; a historical perspective can cast light on identified declining species.

The groups to be covered will include Vascular Plants, Algae, Fungi, Bryophytes, and Lichens. It is intended that the groups will be published in volumes, all timed to come out at the same time, not in sequence.

It was decided to set a dead-line for recording. The final collection of data would be the last season of 2001. This would allow for 5 field seasons and also record what was around at the time of the millennium.

For accurate recording it was agreed that recorders cover each tetrad at least 3 times; spring, summer and winter, preferably spending 3 hours and using 2 botanists. Eric Greenwood told everyone 'don't stop in a tetrad until you have at least 250!' (vascular plants that is). Vera Gordan, who should know as she can remember the work carried out with the Travis Flora, noted that there will always be one species which will be found just one week after publication!

Records need to be dated and hold a 6 figure grid reference. It was identified that there should be a precaution made for loss of data. Liverpool Museum is happy to act as a receptacle to hold an archive of record copies.

A Steering Group was set up including representatives of each flora group; Peter Gateley (vascular), Mike Gosling (lichens), John Lowell (bryophytes), Rita Cook (fungi), plus Vera who has had previous experience and can represent the continuity of the Flora. Their role will be to co-ordinate the collecting of data and validation of the records. They will be able to provide an overview of the project and therefore be able to concentrate individuals where necessary on needy (un-recorded) areas.

Angus Gunn will produce a newsletter to keep interested parties informed of the procedures to follow for contributions and progress of the project.

Donna Hughes

Evening Meeting Reports

Plants People, Places

A report based on a talk by Mike Palmer presented to the Society on 11th March 1997

The *Plants, People, Places (PPP)* project has been running for just over four years now and so on the night there was plenty to talk about, however, as a full write-up would swamp *Parnassia* I have elected to embrace just a small selection from the topics covered, with emphasis placed upon recently collected material and/or material for which I feel further information may be forthcoming from the readership. So please read with a pen in one hand and scribble down any memories or thoughts you have relating to any of the following.

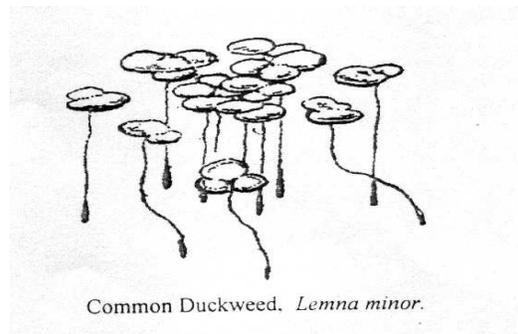
Primrose Day

Within PPP's mail bag there have been two recent mentions of Primrose Day, not as memories of the senders but rather of their mothers, thus placing the information in the 1920s and 30s. Hazel Owens tells of how her mother and classmates took posies of primroses to school on Primrose Day and received lessons on Lord Beaconsfield. Primrose Day was established by the Primrose League in the mid 1880s to honour Lord Beaconsfield, aka Benjamin Disraeli, in a fashion akin to Charles II and

Oak Apple Day, by the wearing of a primrose, the former Prime Ministers' favourite flower, on the anniversary of his death, 19th April. Roy Vickery, in his Dictionary of Plant Lore, states "*the enthusiasm demonstrated on Primrose Day in the decade after Disraeli's death was not maintained, and today it passes virtually unnoticed*". This is evidently true unless somebody can tell me otherwise. However, does this association of flower and Prime Minister persist in other ways. Were public houses, such as the Primrose in Wallasey and the Primrose Vaults in St Helens linked with Disraeli in some way? Why do the Lancashire Fusiliers wear a primrose coloured hackle in their caps and have a primrose on their regimental badge?

Jenny Greenteeth

Jenny, or Ginny as she is sometimes known, has already featured in several PPP newsletters, most notably Roy Vickery's article in newsletter N^o. 5. Jenny seems to be very much a North-west phenomenon, especially around Merseyside. Stories of how she hides in deep pools under a blanket of duckweed ready to drag unsuspecting children, who foolishly stray to near to the edge, under the water seem familiar to many Liverpoolians. However, different people seem to have different stories to tell as I have found when giving talks elsewhere. According to one person I met in Manchester, '*Jenny Greenteeth lives down the grid*'. Another person from the Wirral refers to Duckweed as '*Babies tears*'. Do these tears relate to the unsuspecting children Jenny has caught or to experiences of the real dangers of young children mistaking a blanket of Duckweed for solid ground?



Common Duckweed. *Lemna minor*.

On a similar tack I have also heard one or two people mentioning Daddy Bunchie, who appears to be another *nursery bogey* used to frighten children away from dangerous situations. The link to plants here, however, is far more tenuous and based on one person describing the seed heads of Dandelions as Daddy Bunchies.

Any further information on Jenny Greenteeth or Daddy Bunchie, long or short, would be both superb and much appreciated.

Thunderflowers

Vera Gordon, one of several members to receive mention in Richard Mabey's recently published *Flora Britannica*, states that Wood Crane's-bill, *Geranium sylvaticum*, is sometimes known as *Thunderflower* in the North west of England. It was with disappointment, however, that I discovered on the night of the talk that the north-west referred to was not the area covered by the PPP project, but further north in former Westmorland. However, I did have the consolation of already finding another reference to Thunderflowers in Roy Vickery's Dictionary, from within the PPP territory - the Macclesfield area where "*it was believed that Rosebay Willowherb should not be picked, otherwise a thunderstorm will ensue*". What other weather related plants can members tell of?

Fir-bobs

PPP has collected much information on local place names based on plants in one way or another. A recent variation on this theme came from Barbara Fisher, who, although now living in Leyland, grew up in Higher Bebington on the Wirral. "*Anyone born there was known as a Fir-bob. I don't know why except for there were many woods and fir trees*". Unfortunately there were no members from Higher Bebington present at the talk to confirm this or offer further explanation. Can any of our Wirral contingent shed any more light?

Cromwell's Oak

Thanks go to Mrs A.V. Howitt of Rainhill for sending in a cutting from the St Helens

Star on *The Legend of Cromwell's Oak*. Much has been heard of Charles II's arboreal exploits whilst fleeing from the Roundheads, but what of his pursuer? More than half a century ago at a junction in Sutton Manor grew Cromwell's Oak. According to one story a bottle of whiskey was placed amongst its roots when it was originally planted (why?), however, another story tells of how the tree marks the last resting place of Oliver Cromwell's horse. Can any of our St Helens members confirm either of these stories or, indeed, add new ones?

Notre Dame's Snowdrop?

Back in 1995 I published some information from L.M. Blanco, a former student of Notre Dame College in Everton Valley telling of the "*Pretty metal badge worn in the centre of our panamas in summer and felt hats in winter, which depicted a white Lily of the Valley on a dark blue background*". Two years later I have received information on why Mount Pleasant Teacher Training College had a Snowdrop as its symbol - "*the founding of the establishment took place on 2nd February, Candlemas day, when Snowdrops were in bloom*". Notre Dame College, at some point, moved location to Woolton and is also now part of Hope College, as is Mount Pleasant Teacher Training College. Were these two different institutions with different floral badges or in fact one institution with different names at different times but with the same flora emblem? What of Hope University College, has it maintained any floral associations?

Nettle Beer

Having read Ron and Marlene Freethy's *Discovering Coastal Lancashire* late last summer I headed north to Heysham where "*in summer the narrow streets are thronged with visitors..... and gallons of the local delicacy, Nettle Beer, are drunk*". Perhaps I missed the main *drinking* season finding only one outlet for this local brew, the Curiosity Corner tea Rooms. Unfortunately, I found it not to be to my, possibly uncultivated, taste, however, I would be interested to here from anybody

else who has gone in search of Nettle Beer to see if this cottage industry is still thriving. Was Dandelion and Burdock ever on the menu in Heysham? What else?

Thanks to all members who have contributed to the project so far - please keep the information rolling in.

Mike Palmer

The Conservation of Mosslands and their Plant Communities -

Dr Martha Newton 11th Feb 97

There is no doubt that Britain is a land of mosses, for mosses, together with liverworts, are the bryophytes which are widely distributed in the mountains, down through the valleys to the coast, and even to the spray zone of the sea. Species are to be found wherever unpolluted surface moisture occurs but, unlike vascular plants, ferns and fern-allies, the vast majority of bryophytes are incapable of drawing water from underground or of conducting it internally through specialised tissues. Surface water is therefore essential for physiological processes, but it is also crucial for the transfer of male gametes, and hence for successful sexual reproduction.

One group of mosses, in particular, is closely associated with water. It plays a vital role in the development, not of all marshes, but of those referred to as mosslands, mosses, peat-bogs, mires or, sometimes, morasses. They are not the marshes which have high levels of nutrients, supporting species such as the Marsh Violet, *Viola palustris*, the Marsh Marigold, *Caltha palustris*, Grass of Parnassus, *Parnassia palustris*, or the Frog Orchid, *Coeloglossum viride*. Rather, they are the swamps of which members of the moss-genus *Sphagnum*, or Bog-mosses, are major components.

The structure of *Sphagnum* plants is such that they are capable of holding up to 600% of their weight in water, and of living under water-logged conditions with, depending on species, a restricted nutrient

supply. In regions with both high rainfall and impeded drainage, water-logged, anaerobic, acidic conditions inhibit decay to such an extent that the old dead parts of *Sphagnum* shoots, along with the remains of other associated plants, accumulate as peat. Its rate of accumulation is, of course, related to climatic conditions, but was generally between about 5,000 and 7,500 years ago during the post-glacial Atlantic period. Birch, pine and oak had already become well established since the end of the last ice-age, and so it is not unusual to find well-preserved trees embedded in peat deposits. Experts can discover in undisturbed peat the long-preserved, intriguing history of changes in the British flora and climate.

Bogs, however are not all alike. In very general terms, it is possible to recognise a) blanket bogs or blanket mires, which occur in upland areas over more or less level land, b) valley mires, which develop wherever drainage is poor, and c) raised mires, which commonly, but not exclusively, are found in lowland areas, having developed over lakes or ponds etc, some of which were created by the action of ice during the last ice-age. Whichever of these types is involved, a dynamic bog-surface is continuously changing, as one or another species assumes local dominance in response to its proximity to the water-table. *Sphagnum cuspidatum*, for instance, grows in bog pools, whereas *S. recurvum*, the commonest species in the Southern Pennines, forms extensive lawns in wet areas. On such a lawn, a number of other species such as *S. capillifolium* and *S. papillosum* will ultimately form hummocks. Collectively, a very substantial body of sponge-like peat accumulates beneath a living, growing surface.



Sphagnum capillifolium

Sphagnum is not only instrumental in the development of these mires, it is also fundamental to the establishment of a wide range of interesting plant communities which, in broad terms, share three main components: a) *Sphagnum* spp.; b) shallowly rooting members of the Ericaceae such as Cross-leaved Heath *Erica tetralix*, Bell Heather *E. cinerea*, Heather *Calluna vulgaris*, Cranberry *Vaccinium oxycoccos*, Bilberry *V. myrtillus*, Bog-rosemary *Andromeda polifolia*, etc; and c) members of the Cyperaceae and Gramineae such as the cotton grasses *Eriophorum* spp., Deergrass *Trichophorum cespitosum*, and Purple Moor-grass *Molinia caerulea*. There is also an associated flora and fauna of rich diversity, including many plants which are specially adapted to cope with a low nutrient supply, e.g. the Sundews *Drosera* spp., the Cotton Grass *Eriophorum vaginatum*, and the liverwort *Odontoschisma sphagni*.

Peat bogs are, however, sites of seriously conflicting interests, and have been so throughout history. On the one hand, they are sites of highly specialised biological variation, as well as valuable assets in their ability to regulate water movement over large tracts of land. On the other hand, they have been grossly exploited throughout the ages. There is a long tradition of cutting peat for fuel, which still continues in some parts of Britain. It is also prized by gardeners for preparing water-retentive composts. Indeed, most of the lowland mosses of northern England have been used for horticultural or agricultural use. Many have been drained and used for the building, not only of towns, but also of railways and motorways. Some of these practices have been small-scale and/or essential at the time, but others have been at best unfortunate. With every turf has gone some of our history and some of our living natural history. Even today, it is possible to identify the nationally scarce *Sphagnum imbricatum* subsp. *austinii* in the peat of Lancashire, a county in which it long since ceased to be part of the living flora.

The recent history of four exploited mosses, a) in Shetland, b) Whixall Moss, Shropshire, c) Ashton-under-Lyne Moss, Lancashire, and d) Solway Moss, serves to illustrate some of these points. More importantly, it helps to focus attention on the wonderful variety of wildlife, including birds, mammals, lizards, adders, insects and spiders, to which mosslands afford habitat, and to alert us to the threats to which this wildlife is exposed.

Dr Martha Newton

Rimrose Valley Orchids

I have been studying the four species (& hybrids) of *Dactylorhiza* marsh orchids of Rimrose Valley Marsh for 11 years. A count of flowering spikes has been made each year since 1987, and in the last two years I have studied the basic ecology and niche of the orchids as project work for my Open University degree. This has looked at the relationship with the surrounding vegetation and also some aspects of hybridisation and hybrid vigour.

The Rimrose Valley is a sliver of open land between Litherland, Netherton and Crosby alongside the Leeds-Liverpool Canal. Rimrose Marsh is at grid reference SJ338994. Over the last 15 years I have recorded 309 species of flowering plant in the Valley, including some species found here mid 19th century and recorded in Hall's 1839 Flora (e.g. *Carex hirta*, Reed Canary Grass and Greater Spearwort). The list includes 26 grasses, 7 sedges and 19 other monocotyledons, and 232 species of dicotyledons. I have incidentally also recorded 380 animals (including 83 bird species). Plants of note include Greater Spearwort, a single plant of Dropwort, Wormwood and Good King Henry. The old farm fields have Field Penny Cress, Orange Hawkweed, Field Pansy and Corn Cockle.

The marsh has four main habitats: - dense beds of Reed and Reed Canary Grass; open marsh community; willow carr and open water. Species of note are Gypsywort, Greater Spearwort, *Carex disticha*, *C.*

flacca, *C. remota* and *Eriophorum vaginatum*.

But the most surprising fact about the site is its continued existence! However, it is Green Belt, and includes two proposed LNR's. It is now a Country Park administered by Sefton MBC.

The main orchid species is Southern Marsh Orchid *Dactylorhiza praetermissa*, which occurs in thousands, with a peak of 15851 in 1987. The problem of course with *Dactylorhiza* orchids is their readiness to hybridise, so sometimes identification is not exactly easy!

The population of orchids has stabilised at around about 2000 flowering spikes in the last few years, but their distribution has changed dramatically. The areas that used to hold large numbers are now a metre high in Reed, Greater Willowherb and Michaelmas Daisy, and the orchids are now colonising former farmland that was still in cultivation 8 years ago, these orchids are quite an early coloniser.



Common Spotted Orchid, *Dactylorhiza fuchsii*

The study on hybridisation looked at eight characters distinct between Common Spotted and Southern Marsh Orchid (stem solidity; leaves spotted or not; bract width and length; labellum lobes; flower colour; patterning of spots on flower). 100 orchids were checked with just two 'pure' Common Spotted, 3 hybrids closest to Common Spotted, 15 hybrids closer to Southern and 81 'pure' Southern Marsh Orchid. The hybrid between these two species is *D. x grandis* (Druce) P.F.Hunt. In previous counts, some 97 % of flowering spikes

were thought to be Southern Marsh Orchid. This is an introgressed hybrid population, with the environment favouring one parent - the Southern Marsh Orchid.

The second part of the study investigated whether hybrid vigour allowed orchids to continue in areas of taller vegetation where the pure species cannot. Orchid height and the height and composition of the surrounding vegetation was measured for 280 plants. Plotting of orchid height versus vegetation height seemed to show correlation and indeed the largest hybrids were amongst the tallest vegetation. The largest hybrid was 113 cm tall, of which 20 cm was the flower spike; it was in vegetation (Soft Rush and Greater Willowherb) some 90 cm high.

The study of vegetation associations and niche of orchids involved use of a 25 x 25 cm quadrat to work out percentage cover and height of plants around 140 orchids. Twenty-six plant species were found within the quadrats. Three species seemed to have the most common association: - Creeping Thistle, Yorkshire Fog and Creeping Buttercup. The height of the vegetation, even in one quadrat, varied from 20-103 cm. Further details of the associations of individual orchid species are given below in the species summaries.

There follows a brief summary of the characteristics and results for each species, subspecies or hybrid.

Summary of each species

Southern Marsh Orchid (and hybrids closest to this)

By far the commonest orchid (up to 97% of orchids here are this species) with a peak of 15851 in 1987, since then declined to a low of 1565 in 1995, with a slight increase to 1927 in 1996.

'Pure' Southern Marsh Orchid ranged from 13-93 cm tall, averaging 44cm. Flower-spikes ranged from 2-18cm long. The vegetation they were found in ranged from 12-81 cm high.

Hybrids close to Southern were in vegetation 12-90cm high, flower spikes ranged from 2-25cm and the plants were 26-113 cm tall.

Northern Marsh Orchid (and hybrids closest to this)

Peak year was 1988 when 190 flowering spikes, but since declined and only 1 flowering spike for 3 of last 5 years, the other counts of 11 and 37. The area where originally found is now a reed swamp almost impossible to penetrate now; an excellent example of succession from farm fields to open marsh to reed swamp. Northern Marsh Orchids are dark flowered and smaller, 15-67 cm tall (average 37cm); with flower spikes 3-12 cm long. The vegetation surrounding them was 5-48 cm high; average of 29 cm. Northern Marsh Orchids at this site seem to be linked with Horsetail, *Angelica* and Yorkshire Fog on open parts of the marsh.

Common Spotted Orchid

Peaked at 85 in 1987, drop to only two in 1988, and then single figures until 13 in 1996. Flower spikes ranged from 2-8cm long on plants growing 15-62 cm high (average 39 cm). Found amongst sparse vegetation 12-51 cm high (averaging 26cm).

Hybrids between Common Spotted Orchid and Southern Marsh Orchid

Peak was in 1987 at 213, averaged 42 since, but was dip 1990-1993 when only single figures. Plants averaged 55cm, with flower spikes 2-25 cm long, in vegetation 39 cm high.

Early Marsh Orchids

Form *coccinea*: from a high of 31 in 1987, down to 7 in 1988, singles in 1989-1990, and then none until 1 in 1996. This is however a difficult plant to find amongst tall vegetation as specimens here are only 25 cm high, with a 5 cm flower spike. The surrounding vegetation averages 18cm. The orchids are amongst short sparse Yorkshire Fog, other grasses and Black Medick, with little Creeping Thistle.

Form *incarnata*: between 0 and 2 have been found each year. Plants are up to 24 cm high, with 6-cm flower spikes. They are to be found in short vegetation only 17-20 cm high. This species is found on the marsh with rush, bare ground and sparse Reed Canary Grass.

Steve Cross

Letters

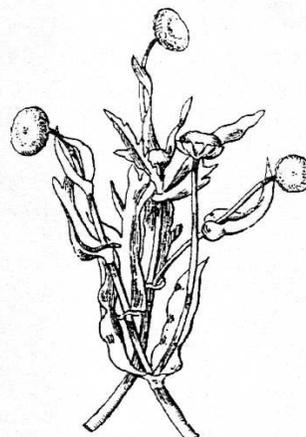
In our November 1996 issue we published a report on the field meeting to Moreton and Meols led by Dr Keith Watson. A letter was sent by Paul Gutteridge in reponse. The following spelling mistakes were pointed out (which the editorial team take full responsibility for and apologise):

Ranunculus bulbosa should read *R. bulbosus*

Trifolium ornithopoides should read *T. ornithopodioides* and Subterraneum Clover should read Subterranean Clover.

Paul noted that he was gratified to see another botanist tackling this interesting area which he has covered assiduously since 1977. He went on to say -

The ditch you mention as being newly excavated with plentiful Ranunculus sceleratus later in the year was gloriously full of South African Buttonweed, Cotula coronipifolia, in copious quantity and exactly where I remember first seeing it as a child in the 60s. This field is known as Kerr's Field. A very strange alien aquatic has also turned up here, whose identity has yet to be unravelled.



Buttonweed. *Cotula coronipifolia*

You may not know that I have also found Knotted Clover at other various sites in the North Wirral since 1981. These were:- Leasowe Gun Site (1981), Hoylake Municipal Golf Course (1981), at Meols since 1982, Royal Liverpool Golf Links, Hoylake/West Kirby (1987), St Oswald's Church lawn, Bidston (1992), Morgan's Landfill site between Moreton and Meols (1992) and recently at Leasowe dunes.

As mentioned, not to my liking, 'Fenugreek' is now known as Bird's-foot Clover. What was known as Classical Fenugreek, Trigonella foenum-graecum, which was found at Claughton in 1863, is now known as Fenugreek. I personally find this very confusing and would prefer to use the old vernacular names.

I first found Trifolium ornithopodioides on a clay ridge in front of Parkfield House, Meols on 28.6.86. According to Newton the last record had been at Thurstaston in 1942. It survived at Meols for many years at this original site until the vegetation became coarser, and was taken over by the food-plant of the Belted Beauty Moth, Kidney Vetch. At the site that I used to know as the relict Meols Saline Meadow until this was JCBd ignorantly by Wirral Borough Council and later filled in with sand brought in from West Kirby (just further east from its original site). 15 plants were found still in flower for the most part on 1.10.92. In the mild autumn of 1994 the species flowered here well into November but the demise of the rabbit population and consequent grazing of this stretch of land meant that species was gradually pushed out to the edges of the area. Incidentally, since sand was brought in to this site I have discovered here rare trigonal-podded Annual Mercury, Blue Pimpernel (subsp. coerulea), Brookweed, Gipsywort, Wild Thyme, Small Melilot, Canadian Fleabane, the return of Lesser Centaury and Bog Pimpernel and unusual pink-flowered Field Speedwell as well as Slender Trefoil, Knotted Clover and Bird's-foot.

The Subterranean Clover, Trifolium subterraneum, was found by myself further

west on May 11th, 1987 in the area where I originally found the T. ornithopodioides. The former was abundant here with three large patches and a small central one. These three large outer patches were later destroyed by the council inadvertently despite my target-noting the site for the, then, Cheshire Conservation Trust when I worked for Wirral Wildlife. This destruction was presumably done to keep 'travelling people' off the land (a ditch was dug right through the Subterranean Clover and all trace of it lost). I have a herbarium sheet to confirm the record and Charles Russell of West Kirby photographed the species. I was fortunate enough to rediscover the species on 10.4.93 just north of here behind Dove Point and, when checked on 12.5, it was found to be well in flower, with an attendant small black weevil!

Cypress Spurge was first noted in front of Burbo Caravan Park in 1982 and an even larger quantity grows amongst thick Marram just SE of here and found the other autumn. I found Prickly Poppy, Papaver argemone, in May 1987 near the Cypress Spurge site and have a confirming herbarium sheet. I found this the same day that a New Ferry birder located the North Wirral's first Tawny Pipit (which I glimpsed), just further inland. Regarding Bur Parsley, Anthriscus caucalis, which was known as Bur Chervil, I found this species to be quite common in a restricted area at Wallasey Golf Course, where the plants grew in the partial shade of White Poplars in an open sandy area near to the seaboard. At this SSSI, plants were at SJ 285 932, when they were collected on May 28th, '82. In 1987 I located plants at the base of a hedgerow at Meols, near the Coastguard's. So your Parkfield specimens probably originated from these.

Your finding of Dropwort, Filipendula vulgaris, is a very welcome addition to the list of species for the Roman Road dunes area, where I have known Wild Thyme since 19.7.81 - the latter also in a field next to Eastview Farm at SJ 243 910 on 25.7.82, the field having since been altered. Roman Road dunes area is very

interesting and as well as the usual native sand dune species such as *Thyme-leaved Sandwort*, *Crow Garlic*, *Lady's Bedstraw*, *Sand Cat's-tail*, etc (and also *Lesser Meadow Rue*) I recorded here in 1982 clumps of *Crested Hair Grass*, *Koeleria macrantha* - the first Cheshire record of same (corroborated by two herbarium sheets) but have not found it here since. Perennial Ragweed, *Ambrosia psilostachya*, was of common occurrence on the Roman Road dune system - discovered in the late summer of 1982 and still present as a 10 x 12' patch here on 5th August, 1986 (SJ 226 902). For whatever reason the plant has now died out here and was not relocated in 1987. Photographic and herbarium evidence is in my hands and this is another species overlooked by Newton. Great Brome, *Anisantha diandra*, is a Mediterranean grass which has been established at Eastview Farm and Roman Road dunes since July, 1985, verified by Angus Gunn.

Paul G Gutteridge

BOOK REVIEWS

A New 'Stace'

New Flora of the British Isles, by Clive Stace, second edition. Cambridge University Press, 1997. ISBN 0 521 58933 5.

Six years after the first edition was published, this comprehensive yet concise flora of Britain and Ireland has been substantially revised and updated. Non-native plants are given more or less equal treatment to the indigenous flora, with the result that the book is equally effective when identifying both categories of plant in the wild. Around 320 taxa have been added to the new edition, including 129 species. Two of the most serious deficiencies in the first edition have been rectified: there is now a full index down to subspecies level, including authors' names and common names, and the vastly improved illustrations now extend over 160 pages. Both the index and the keys have a rather quirky style of indentation,

but the text is now set in an economical laser font.

Some of the critical taxa new to the first edition such as *Utricularia stygia* have been provided with excellent comparative illustrations, and in the second edition the expanded treatment of *Cotoneaster* is particularly thorough. The treatment of *Urtica galeopsifolia*, the Fen Nettle, by contrast reflects the sceptical reception with which the discovery of a new native taxon was initially greeted: it is placed in synonymy with the Common Nettle. *Parnassia palustris* is mentioned without reference to infraspecific taxa; the endemic *Centaurium latifolium* is described as 'probably a mutant of *C. erythraea*'. Common crop plants are included, as are many garden escapes, though I do find some of the given English names rather odd, particularly *Hedera colchica* which is named Persian Ivy. Although the white-flowered variant of *Calluna vulgaris* is mentioned, the hairy-leaved variant is not; the absence of such refinements, which helps to keep the size of the book down, does leave scope for a critical Flora to complement the present book.

John Edmondson

Plant Monstrosities

Botanical Monstrosities, a first step in plant teratology, by Martin Cragg-Barber. *A That Plant's Odd* Publication, April 1997. ISBN 0 9530388 0 7

This 32 page A5 size booklet provides, as the title suggests, an introduction to all manner of deviations from the norm exhibited by certain members of our natural and cultivated flora. The author begins by noting the work of Maxwell T. Masters and his *Vegetable Teratology* as the best attempt at a comprehensive treatment in English. As this work was published in 1869 a more contemporary attempt is overdue. This booklet does not pretend to be such an attempt. Rather it is intended to provide clues on to what to

look out for and serve as an introduction the 'Aberrant Flora Project' and its, already up and running, newsletter, *That Plant's Odd*. Further details from these can be obtained by sending an SAE to *Martin Cragg-Barber*, *That Plant's Odd*, 1 Station Cottages, Hullavington, Chippenham, Wilts SN14 6ET.

Now back to the booklet. Martin Cragg-Barber introduces us to the world of teratology through a series of examples illustrated with E.M. Williams' line drawings from the 1869 publication. Monstrous pears, fasciated dandelions, spiralling hawthorns are among the line up. The author mixes his own comments with quotes from Masters and, here and there, the challenging abbreviation, P.p.m.w. - 'please prove me wrong'. The booklet concludes with brief notes on *Causes and Speculations* and *Genetic Clues*. All in all, a brief but interesting booklet and a sign of bigger things to come.

Mike Palmer

Officers

President:	Dr Angus Gunn.
Vice Presidents:	Dr John Edmondson Mr Peter Gateley.
Hon. Secretary:	Vera Gordon, 23 Alder Grove, Waterloo, Liverpool L22 2AL.
Hon. Treasurer:	Douglas Lockwood 13 Stanley Road, Formby, Liverpool, L37 7AN
Hon. Editors:	Mike Palmer. Natural History Centre, Liverpool Museum William Brown St. Liverpool L3 8EN ☎ 0151 478 4281
	Donna Hughes Botany Department Liverpool Museum <i>As above</i> ☎ 0151 478 4373
Hon. Librarian:	Donna Hughes <i>As above</i>