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Cardiff, July, 1974

EDITORIAL

This issue contains a paper of unusual stimulus and fresh approach dealing with distributional and survival interest in an ecological environment prone to disregard because it is assumed to have no interest beyond the spasmodic occurrence of some unexpected species. It is one thing to record the rare appearance in an urban setting but a systematic survey is a much more valuable contribution to knowledge of the changing flora of Britain. We are most grateful to Mr. Chater for this paper.

Also appears in this number an obituary notice of the late Dr. H.A. Hyde. The present editor has an especial cause to remember Dr. Hyde with gratitude. In 1949, in response to an appeal for help to save the semi-natural oakwoods of the Upper Towy valley, he came with Mr. Wade from Cardiff to meet the then Director of Forestry for S. Wales, Mr. Russell and myself. Dr. Hyde, suaviter in modo, fortiter in re, quietly rejected all compromise and carried the day. Those oakwoods now lie almost wholly submerged beneath the spectacular but mainly sterile waters of the Brianne Reservoir.

That there has been a delay in the appearance of this obituary is due to an error for which the present editor must take all responsibility.

There is some welcome evidence of a growing sense of responsibility towards conservation of plant life even amongst non-botanists. I have sensed this keenly in the frequent contacts I have with owners of the smaller Welsh farms who take pride in any species of special interest on their land (one such valued cooperator has just asked advice on the improvement of his pasture without destruction of an interesting *Rubus*). There is, however, a danger lest, as "rarities" and new records grow more scarce, botanists themselves should be the destroyers. In search for critical species and for newly-established and difficult taxa a recklessness of 'blanket collection' can be disastrous and must be highly deleterious to the local status of the plant, moreover reducing the high standard of example in the Society to a scandal of selfishness which no scientific zeal can excuse.

THE STREET FLORA OF CENTRAL ABERYSTWYTH.

A.O. CHATER.

INTRODUCTION.

This is a brief study of the flora of the most urban area in mid-Wales. The botanist who has to spend an hour in the middle of one of our towns may close his mind to the possibility of seeing anything of interest, unless he can find a demolition site or a deserted garden, but one may be astonished at how many species are usually to be found in what at first glance may look like a completely plantless street. In the notes which follow I have confined myself to higher plants of what I considered to be the most extreme urban habitats, that is to the plants growing on the roads, in the gutters, on pavements, under gratings in the pavements, on walls fronting the streets, in cellar-wells, and on the steps up to front doors or down to cellars from the street. I have also included small patches of soil around street trees (occurring only in Alexandra Road, North Parade, Portland Street, Thespian Street and Queen's Road), and the miniature beds of earth or miniature gardens in Alexandra Road, North Parade, Portland Street and Marine Terrace; only 7 species are confined to these habitats (Geranium molle, Aegopodium, Salix cinerea ssp. atrocinerea, Linaria repens, Lamium purpureum, Petasites fragrans and Poa trivialis) and were it not for the difficulties of defining boundaries of habitats they would have been omitted. The weed flora of the smaller public flowerbeds is usually negligible, due to the efficiency of the borough gardeners. I have excluded all other flowerbeds and gardens (such as those in Queen's Road, Thespian Street, outside Nos. 18-20 Marine Terrace, in Alexandra Road, etc), all lawns, demolition sites and areas of waste ground (such as at the corner of Pier Street and Great Darkgate Street and in Princess Street), and all alleys or yards leading off the streets.

It will be seen from the plan that I have considered central Aberystwyth to be bounded by South Road, Mills Street, Alexandra Road, Thespian Street, Queen's Road, Bath Street, Marine Terrace, King Street, Laura Place, St. Michael's Place and Sea View Place. I have excluded Crynfryn Buildings, Crynfryn Row and Laurel Place since they are for the most part untarred, pedestrian areas more akin to yards or back gardens than to streets. On the other hand I have included Windmill Court and Mccr Lane.

It would be interesting to investigate the floras of the back gardens, waste patches, grassy areas such as Bethel cemetery, St. Mary's churchyard, the very rich Alexandra Road school lawn, what is left of St. Michael's churchyard etc., but this is outside the ecological scope of the present note. The floras of Crynfryn Buildings (some 30 spp.), the alleys behind Nos. 25 - 43 Portland Road (some 40 spp.) and No. 14 Great Darkgate Street are especially rich, and the plant succession on the well-known demolition site at the corner of Pier Street and Great Darkgate Street would be interesting to record.

For the purposes of the listing, several of the larger streets have been divided into two or more parts. The recording was all done in 1970 - 1973. The area is entirely within the 1 km. grid square SN/5881, and the height above sea level of the road surfaces ranges from 10 ft. to 61 ft.

GENERAL REMARKS.

The two commonest species, Poa annua and Sagina procumbens are both more or less prostrate perennials with stems rooting at the nodes, and both can set abundant seed, rather quickly for perennials, after germination. Both are especially abundant between paving stones, and Poa annua generally behaves as an annual only in richer habitats where it forms larger tufts. Taraxacum is the next commonest plant; it flowers less often, but can persist for many years in spite of treading and other damage, as can another almost equally abundant plant of rather similar habit, Plantago major. The other two especially abundant species are, by contrast, of erect habit, Senecio vulgaris and Sonchus oleraceus, both have an unusual ability to send out new shoots after breakage, even though Senecio vulgaris probably behaves only as an annual. These six species are found in most of the streets. Stellaria media is another very widespread species, but is very ephemeral and does not flower often.

There is a group of common species characteristic of walls, including several ferns. The older, mortared walls, usually separating yards or gardens from the streets, mostly have on them Dryopteris filix-mas, Phyllitis and Cymbalaria, and sometimes also Asplenium rut-muraria, A. trichomanes, Polypodium vulgare and others. Poa pratensis is almost restricted to the tops of old walls. Especially rich walls can be found in Moor Lane, where six species of fern, including abundant Ceterach, can be found, but many other streets have good old walls such as Gray's Inn Road, King Street and Castle Street. Smoother, cement-pointed walls, such as those of the cinemas in Bath Street, outside chapels in various streets, and those of the houses themselves on the north side of North Parade can be almost as rich; No. 36A North Parade has supported a small population of Pteridium for many years.

Iron gratings, opening onto cellar windows or coal-holes, are found on the pavements of several streets and are especially interesting. The cavities below them often have sloping sides which collect a deposit of dirt from the street, remain damp, and are one of the few habitats in which plants can grow undisturbed to a large size. Phyllitis and Dryopteris filix-mas are especially common here, as are other shade-tolerant plants such as Cymbalaria, Circaea and several species of Epilobium. A sizeable Corylus bush can be seen under a grating in Eastgate and bushes of Acer pseudoplatanus and Ulmus under gratings in Great Darkgate Street. Other especially good gratings are in New Street and Bridge Street.

Many houses have deep wells, not covered by gratings, between the pavement and the cellar or lower ground floor windows, and much can be found in these places, and on the steps leading down into them. Epilobium montanum, E. obscurum, Rumex crispus, Stellaria media, Dryopteris filix-mas and Asplenium trichomanes are especially characteristic. Such cellar-wells can be seen in, for example, the west part of Portland Street and outside several houses in Marine Terrace. Steps up to front doors, such as those on the south side of North Parade, often support a rich fern flora.

Many perennial species on the streets are very ephemeral and may never flower. The abundance of seedlings of Rubus fruticosus is rather surprising. Tussilago has persisted for several years in very exposed places but probably never flowers, and Chamaenerion, another plant common enough on waste ground and in abandoned gardens, does not flower on the streets. Some annuals, however, are surprisingly persistent in the most unlikely places, such as Solanum nigrum which has grown for several years on the pavement outside No. 12 Cambrian Street beneath a ledge where pigeons roost, and Sagina apetala ssp. erecta on the promenade.

The influence of the sea is not as directly obvious as one might expect, presumably because in such habitats as these other factors are more strongly limiting. Only three predominantly maritime species are found and (except for one isolated occurrence) they are confined to the streets along the seaward edge of the area. Cochlearia danica grows at the base of walls in St. Michael's Place and Laura Place, and in the miniature gardens outside Nos. 3 and 7 Marine Terrace, and the other annual, Catapodium marinum, grows abundantly in Laura Place and Sea View Place, and regularly in smaller numbers in King Street. Plantago coronopus, usually behaving as a Perennial, is well-established only between the paving stones in Sea View Place; it used to grow, as did Cochlearia danica, at the west end of New Street until the pavement was re-cemented there recently.

One special feature deserves mention. There is an iron grating 122 x 61 cm. near the north end of Pier Street, outside the Pier Hotel, that has mostly got filled in up to pavement level, and in 1972 twenty species were growing in it. This at least is always worth a glance from the passing botanist.

THE STREETS.

The streets or parts of streets covered by this survey are listed here and numbered; these numbers are used to indicate distributions in the list of plants which follows, and also appear on the plan. The numbers following the streets indicate the species found in them.

1. South Road (from Sea View Place to Penmaesglas Road).
2, 8, 22, 48, 49, 53, 74, 81, 82, 92, 95, 100.
2. Sea View Place. 2, 14, 22, 41, 53, 50, 74, 76, 81-83,
90, 92, 99, 100.
3. Custom House Street. 2, 8, 22, 33, 35, 40, 74, 82,
88, 92, 95, 100.
4. Penmaesglas Road. 8, 20, 22, 33, 42, 74, 82, 92,
94, 95, 97, 100, 103.
5. South Road (from Penmaesglas Road to Bridge Street).
4, 8, 14, 20, 22, 37, 75, 82, 91, 95, 98, 100, 103.
6. Vulcan Street. 2, 20, 22, 53, 59, 74, 82, 92, 100.

7. Prospect Street. 8, 19, 22, 33, 40, 52, 69, 74,
75, 81, 82, 90, 92, 95, 97, 98, 100.
8. High Street. 2, 7, 8, 11, 22, 41, 56, 74, 81-83,
85, 88, 92, 95, 97, 100, 105.
9. Bridge Street (from Mill Street to Queen Street).
2, 4, 7, 8, 20, 22, 33, 37, 38, 42, 50, 79,
82, 92, 95, 100.
10. St. Michael's Place. 16, 22, 28, 41, 74, 75, 81,
92, 95, 100, 108.
11. Great Darkgate Street (from St. Michael's Place to
St. James's Square). 5, 20, 22, 47, 50, 51, 74, 82,
92, 95, 100.
12. St. James's Square. 7, 8, 10, 20, 22, 28, 39-41,
44, 55, 58, 62, 69, 74, 82, 90, 92, 95, 97, 100, 105.
13. Great Darkgate Street (from St. James's Square to
Pier Street). 2, 4, 15, 20, 22, 40, 92, 95, 100,
105, 108.
14. Princess Street. 2, 8, 22, 31, 53, 69, 88, 90, 92,
95, 100.
15. Bridge Street (from Queen Street to Great Darkgate Street).
82, 95, 100.
16. Laura Place. 2, 8, 10, 16, 19, 22, 39, 41, 44, 53, 69,
75, 82, 83, 90, 92, 95, 98-100, 108.
17. Castle Street (from King Street to New Street). 5, 8,
17, 22, 24, 28, 33, 44, 69, 74, 82, 90, 92, 95, 100,
101, 105, 106.
18. Castle Street (from New Street to St. James's Square).
10, 17, 49, 82, 95, 98, 100.
19. New Street. 2, 8, 10, 16, 22, 33, 40, 43, 44, 53, 57,
69, 74-76, 82, 83, 92, 95, 100, 105.
20. King Street (from Laura Place to Pier Street). 2, 8,
10, 22, 33, 41, 44, 69, 74, 76, 78, 82, 88, 93, 95,
99-101, 103, 105.

21. Pier Street. 7, 8, 15, 20-22, 29-31, 33, 40, 41, 50, 71, 74, 77, 81, 82, 90, 92, 95, 97, 100, 103, 105.
22. Mill Street. 5, 20, 23, 25, 40, 48, 53, 69, 74, 82, 92, 95, 100, 103.
23. Powell Street. 2, 5, 6, 10, 22, 33, 40, 42, 48, 52, 74, 82, 95, 100, 105.
24. George Street. 4, 8, 22, 33, 52, 82, 95, 100, 103.
25. William Street. 2-5, 7, 8, 20, 22, 55, 69, 72, 74, 82, 90, 92, 95, 97, 100, 103, 104, 107.
26. Gray's Inn Road. 3-6, 8, 10, 12, 20-22, 40, 67, 69, 82, 89, 92, 95, 98, 100, 105.
27. Queen Street. 2, 8, 20, 22, 39, 40, 42, 74, 81-83, 95, 97, 100.
28. Great Darkgate Street (from Pier Street to Baker Street). 2, 8, 20, 28, 49, 50, 56, 69, 95, 97, 100.
29. Market Street. 20, 22, 37, 55, 82, 92, 95, 100.
30. Eastgate. 2, 8, 9, 20, 22, 23, 25, 39, 40, 42, 43, 48, 52, 53, 57, 82, 92, 95, 100, 103, 108.
31. Windmill Court. 5, 8, 22, 40, 50, 82, 92, 100, 103.
32. Marine Terrace (from Pier Street to Terrace Road). 2, 8, 12, 16, 20-22, 25, 33, 39-41, 52, 55, 59, 64, 74, 80-83, 90-92, 95, 97, 98, 100, 103, 108.
33. Alexandra Road (from Mill Street to Terrace Road). 19, 22, 33, 34, 40, 74, 82, 93, 95, 100, 107, 108.
34. Chalybeate Street. 2, 7, 8, 20, 32, 37, 56, 82, 92, 95, 98, 100, 101.
35. Union Street. 2, 5, 6, 20, 22, 37, 52, 74, 82, 95, 100.
36. Cambrian Place. 2, 8, 19, 22, 33, 37, 48, 66, 69, 82, 88, 95, 100, 105.
37. North Parade (from Baker Street to Terrace Road). 20, 22, 74, 100.

38. Baker Street. 2, 4, 5, 8, 10, 22, 37, 49, 61, 82, 92, 95, 97, 100, 103, 106.
39. Portland Street (from Baker Street to Terrace Road). 2, 4, 5, 8, 12, 18, 20, 22, 31, 35, 40, 42, 44, 49, 55-57, 69, 70, 74, 77, 79, 82, 92, 95-97, 100.
40. Alfred Place. 2, 8, 22, 36, 40, 48, 67, 74, 88, 92, 95, 98, 100.
41. Corporation Street. 3, 5, 8, 20, 22, 25, 33, 39-41, 45, 49, 52, 53, 55, 63, 64, 69, 71, 74, 82, 83, 86, 95, 100
42. Alexandra Road (from Terrace Road to Thespian Street). 5, 15, 19, 20, 22, 33, 40, 49, 81, 82, 92, 93, 95, 100.
43. Terrace Road (from Alexandra Road to North Parade). 22, 82, 91, 95, 100.
44. Brewer Street. 5, 12, 20, 22, 69, 74, 82, 87, 100, 103.
45. Moor Lane. 2, 4-6, 8, 10, 22, 40, 42, 44, 65, 67, 69, 81, 82, 92, 95, 100, 105.
46. Cambrian Street. 20, 22, 40, 74, 77-79, 81, 82, 84, 90, 95, 100, 106.
47. Thespian Street. 4, 5, 8, 12, 20, 22, 41, 44, 55, 63, 69, 74, 81, 82, 97, 100, 101.
48. North Parade (south side, from Terrace Road to Queen's Road). 2, 7, 8, 12, 15, 20, 22, 40, 42, 43, 48, 50, 69, 79, 81, 82, 95, 98, 100, 103, 105.
49. North Parade (north side, from Terrace Road to Queen's Road). 1, 8, 12, 14, 20, 22, 23, 31, 40, 41, 46, 48, 49, 54, 68, 69, 74, 82, 87, 92, 93, 95, 99, 100, 102, 108.
50. Terrace Road (from North Parade to Marine Terrace). 50, 82, 95, 100, 106.
51. Portland Road. 22, 26, 33, 82, 95, 100.
52. Portland Street (from Terrace Road to Queen's Road). 4, 5, 8, 12-14, 20, 22, 27, 33, 40, 42, 44, 48, 53, 55, 73, 81, 82, 93, 95, 100, 103.

53. Bath Street. 2, 4, 5, 8, 22, 31, 33, 40, 44, 50, 69, 82, 89, 92, 95, 100, 105.
54. Queen's Road (from North Parade to Bath Street). 2, 5, 20, 22, 28, 33, 39, 48, 49, 52, 74, 81, 82, 92, 93, 100.

THE PLANTS.

The taxa are numbered consecutively. The numbers following the names indicate the streets in which they are found:

1. Pteridium aquilinum. 49. Only the wall of No. 36A North Parade, where a few dwarf plants with fronds 5-15 cm. are well-established.
2. Phyllitis scolopendrium. 1-3, 6, 8, 9, 13, 14, 16, 19, 20, 23, 25, 27, 28, 30, 32, 34-36, 38-40, 45, 48, 53, 54. Common, chiefly as dwarf plants on walls and as well-grown plants under gratings and in cellar-wells.
3. Asplenium adiantum-nigrum. 25, 26, 41. Rare, on old walls.
4. A. trichomanes. 5, 9, 13, 24-26, 28, 39, 45, 47, 52, 53. On walls, under gratings and in cellar-wells.
5. A. ruta-muraria. 11, 17, 22, 23, 26, 31, 35, 38, 39, 41, 42, 44, 45, 47, 52-54. Common on walls.
6. Ceterach officinarum. 26, 35, 45. A few plants on an old high wall at the west end of Gray's Inn Road, and on an old wall in Union Street, but abundant on the old walls in Moor Lane.
7. Athyrium filix-femina. 8, 9, 12, 21, 25, 34, 48. A few plants under gratings and in damp crevices in walls; well-established on steps on the south side of North Parade.
8. Dryopteris filix-mas. 1, 3-5, 7-9, 12, 14, 16, 17, 19-21, 23-28, 30-32, 34, 36, 38-41, 45, 47-49, 52, 53. The commonest fern, as dwarf plants on walls and as well-grown plants under gratings and in cellar-wells, on steps

9. D. dilatata. 30. A few plants under a grating.
10. Polypodium vulgare. 12, 16, 18-20, 23, 26, 38, 45.
Chiefly as dwarf plants on walls.
11. Ranunculus acris. 8. Between paving stones.
12. R. repens. 26, 32, 39, 44, 47-49, 52. In pockets of earth, miniature gardens and at bases of walls.
13. Fumaria officinalis. 52. Base of wall outside Salem Chapel, 1973 only.
14. Coronopus didymus. 2, 5, 49, 52. Between paving stones and on earth around trees.
15. Capsella bursa-pastoris. 13, 21, 42, 48. Between paving stones and on earth.
16. Cochlearia danica. 10, 16, 19, 32. In miniature gardens outside Nos. 3 & 7, Marine Terrace, and elsewhere at bases of walls; only in the seaward streets.
17. Cardamine flexuosa. 17, 18. On old walls.
18. Viola riviniana. 39. At inner edge of pavement at corner of Portland Street and Alfred Place, above a cellar-well; one large plant dating from at least 1965 died in 1973 after cementing around it, but a smaller one survives and flowers abundantly.
19. Cerastium holosteoides. 7, 16, 33, 36, 42. Between paving stones and in pockets of earth.
20. Stellaria media. 4-6, 9, 11-13, 21, 22, 25-30, 32, 34, 35, 39, 41, 42, 44, 46-49, 52, 54. Common weed in miniature gardens, pockets of earth; occasionally at the bases of walls, etc.
21. Sagina apetala ssp. erecta. 21, 26, 32. On the reticulations of a filled-in grating near the north end of Pier Street, at the base of the wall of St. Mary's churchyard in Gray's Inn Road, and between paving stones on the promenade opposite No.6 Marine Terrace.

22. S. procumbens. 1-14, 16-17, 19-27, 29-33, 35-49, 51-54. After Poa annua the commonest species, mostly between paving stones but occasionally also on walls, often flowering when only 1 cm. or so in size.
23. Chenopodium album. 30, 49. Base of wall and pockets of earth.
24. Atriplex hastata. 17. Base of wall, 1972 only.
25. A. patula. 22, 30, 32, 41. Bases of walls, miniature gardens.
26. Malva sylvestris. 51. Base of wall, flowering.
27. Geranium molle. 52. Miniature garden, 1973 only.
28. Acer pseudoplatanus. 10, 12, 17, 28, 54. Bases of walls etc., but only reaching much size under gratings in Great Darkgate Street and against the wall of St. Paul's church.
29. Medicago lupulina 21. In the reticulations of a filled-in grating near the north end of Pier Street.
30. Trifolium dubium. 21. With the last.
31. T. repens. 14, 21, 39, 49, 53. Between paving stones, in filled-in gratings etc.
32. T. pratense. 34. At base of wall.
33. Rubus fruticosus. 3, 4, 7, 9, 17, 19-21, 23, 24, 32, 33, 36, 39, 41, 42, 51-54. Common as seedlings between paving stones and at bases of walls, but surviving for more than a year or so only under gratings.
34. Potentilla sterilis. 33. On the lower wall outside the Alexandra Road school, where it has spread from the lawn.
35. Sedum acre. 3. Well-established between paving stones outside No. 6 Custom House Street, but not flowering.

36. Ribes uva-crispa. 40. Seedling only.
37. Epilobium sp. 5, 8, 29, 34-36, 38. Many young specimens, probably of E. montanum or E. obscurum, cannot be identified for certain.
38. E. hirsutum. 9. Under grating, 1970-1972.
39. E. parviflorum. 12, 16, 27, 30, 32, 41, 54. Bases of walls, in cellar-wells and under gratings.
40. E. montanum. 3, 7, 12, 13, 19, 21-23, 26, 27, 30-33, 39-42, 45, 46, 48, 49, 52, 53. Common at bases of walls, in cellar-wells, under gratings, on steps and on walls.
41. E. obscurum. 2, 8, 10, 12, 16, 20, 21, 32, 41, 47, 49. Similar habitats to the last, but less common.
42. Chamaenerion angustifolium. 4, 9, 13, 23, 27, 30, 39, 45, 48, 52. On and at the bases of walls, but never flowering and usually only reaching c.15 cm.
43. Circaea lutetiana. 19, 30, 48. Abundant under gratings in New Street and Eastgate; on earth below trees in North Parade.
44. Hedera helix. 12, 16, 17, 19, 20, 39, 45, 47, 52, 53. On walls (often spreading from gardens), in cellar-wells and under gratings.
45. Torilis japonica. 41. Base of wall.
46. Aegopodium podagraria. 49. Miniature garden, 1973 only.
47. Heracleum sphondylium. 11. Base of wall at extreme west end of Great Darkgate Street, flowering in 1971, and a young plant in 1973.
48. Euphorbia peplus. 1, 22, 23, 30, 36, 40, 48, 49, 52, 54. In miniature gardens and pockets of earth.
49. Polygonum aviculare. 1, 18, 28, 38, 39, 41, 42, 49, 54. At bases of walls and in miniature gardens.
50. P. persicaria. 9, 11, 21, 28, 31, 48, 50, 53. At bases of walls and well-established in the reticulations of a filled-in grating near the north end of Pier St.

51. Reynoutria japonica. 11. Base of wall, young plant only.
52. Rumex sp. 7, 23, 24, 30, 32, 35, 41, 54. Young specimens, presumably mostly of R. crispus, can often not be identified for certain.
53. R. crispus. 1, 2, 6, 14, 16, 19, 22, 30, 41, 52. Bases of walls, between paving stones, in cellar-wells etc., rarely flowering.
54. R. sanguineus. 49. At base of wall, in fruit.
55. Urtica dioica. 12, 25, 29, 32, 39, 41, 47, 52. As seedlings between paving stones and at bases of walls, only reaching any size against the wall of St. Paul's church where it flowers.
56. Ulmus sp. 8, 28, 34, 39. Seedlings only, at base of walls, but forming bushes under gratings in Great Darkgate Street.
57. Corylus avellana. 19, 30, 39. Forming bushes in a cellar-well in Portland Street, and under gratings in New Street and Eastgate (outside the Prince Albert Hotel).
58. Salix caprea. 12. Base of wall of St. Paul's church.
59. S. cinerea ssp. atrocineria. 32. In miniature garden.
60. Anagallis arvensis 2. At base of wall, 1973.
61. Buddleja davidii. 38. On wall.
62. Fraxinus excelsior. 12. At base of wall of St. Paul's church.
63. Convolvulus arvensis. 41, 47. Spreading from waste ground.
64. Calystegia sepium ssp. sepium. 32, 41. Growing up railings of miniature garden, and at side of Alfred Place Chapel.
65. Solanum dulcamara. 45. On old wall.

66. S. nigrum. 36. Colony of large plants, of several years' standing, on pavement under a pigeon-roost outside No. 12 Cambrian Place.
67. Antirrhinum majus. 26, 40, 45. On old walls.
68. Linaria repens. 49. In miniature garden, 1973.
69. Cymbalaria muralis. 6, 7, 12, 14, 16, 17, 19, 20, 22, 25, 26, 28, 36, 41, 45, 47-49, 53. Common on walls (especially older, shaded walls), in cellar-wells and under gratings.
70. Veronica serpyllifolia. 39. On-steps in a cellar-well.
71. Prunella vulgaris. 21, 41. In the reticulations of a filled-in grating near the north end of Pier Street, and on the broken road-surface at the west end of Corporation Street.
72. Stachys sylvatica. 25. Well-established on St. Mary's churchyard wall.
73. Lamium purpureum. 52. In miniature garden.
74. Plantago major. 1-4, 6-8, 10-12, 17, 19-23, 25, 27, 32, 33, 35, 37, 39-41, 44, 46, 47, 49, 54. Common between paving stones, but flowering usually only in cellar-wells, at bases of walls, etc.
75. P. lanceolata. 5, 7, 10, 16, 19. Rare, between paving stones, not flowering.
76. P. coronopus. 2, 19, 20. Well-established between paving stones in several places in Sea View Place, and at the west end of New Street (until 1972); one plant on an old wall in King Street, 1973.
77. Galium aparine. 21, 39, 46. Seedlings only, at bases of walls and in pockets of earth.
78. Sambucus nigra. 20, 46. Young plant by No. 53 Cambrian Street; another at the east end of King Street.
79. Tussilago farfara. 9, 39, 46, 48. At bases of walls (and under a drainpipe at No. 52 Bridge Street), and in the road gutter opposite No. 27 North Parade.

80. Petasites fragrans. 32. A thriving colony in the miniature garden of No. 9 Marine Terrace, doubtless planted.
81. Senecio jacobaea. 1, 2, 7, 8, 10, 21, 27, 32, 42, 45-48, 52, 54. Between paving stones and at bases of walls, in pockets of earth and miniature gardens; usually as seedlings only and never flowering.
82. S. vulgaris. 1-9, 11, 12, 15-27, 29-36, 38-39, 41-54. Very common in all habitats, frequently flowering and well able to withstand treading and breakage.
83. Bellis perennis. 2, 3, 16, 19, 27, 32, 41. Uncommon, between paving stones, and flowering on the promenade opposite No. 10 Marine Terrace in 1973.
84. Eupatorium cannabinum. 46. By No. 53 Cambrian Street.
85. Achilles millefolium. 8. Between paving stones, not flowering.
86. Tripleurospermum maritimum ssp. salinum. 41. On the broken road surface at the west end of Corporation Street.
87. T. maritimum ssp. inodorum. 4, 49. At bases of walls.
88. Matricaria matricaricoides. 3, 8, 14, 20, 36, 40. Between paving stones and at bases of walls.
89. Chrysanthemum parthenium. 26, 53. At bases of walls.
90. Cirsium vulgare. 2, 7, 12, 14, 16, 17, 19, 21, 25, 30, 46. Between paving stones, in miniature gardens etc., never flowering.
91. Sonchus arvensis. 5, 32, 43. At base of wall in South Road, and on the wall of No. 6 Terrace Road, not flowering; flowering in the miniature gardens of Nos. 8 and 9 Marine Terrace 1970-1973.
92. Sonchus oleraceus. 1-4, 6-14, 16-17, 19, 21-22, 25-26, 29-32, 34, 38-40, 42, 45, 49, 53, 54. Common in all habitats, and though a more or less erect plant like Senecio vulgaris it is similarly able to withstand breakage, and frequently flowers.

93. S. asper. 20, 33, 42, 49, 52, 54. At bases of walls and in miniature gardens, not flowering.
94. Crepis capillaris. 4. Flowering, between paving stones.
95. Taraxacum sp. 1, 3-5, 7-30, 32-36, 38-43, 45, 46, 48-53. In all habitats and often flowering, the third commonest species after Poa annua and Sagina procumbens.
96. Carex sp. 39. A sizeable tuft growing through the tarmac of the road outside No. 6 Portland Street, at the edge of the gutter, not flowering.
97. Festuca rubra. 4, 7, 8, 12, 21, 25, 27, 28, 32, 38, 39, 47. On and at the bases of walls, under gratings and between paving stones.
98. Lolium perenne. 5, 7, 16, 18, 26, 32, 34, 40, 48. At bases of walls, under gratings and between paving stones.
99. Catapodium maritimum. 2, 16, 20, 49. At bases of walls and between paving stones, abundant in Laura Place and Sea View Place, and a few plants at the west end of King Street; one plant in North Parade, 1973.
100. Poa annua. 1-54. The commonest plant, occurring in all habitats but especially between paving stones where it often behaves as a perennial.
101. P. pratensis. 17, 20, 34, 47. On tops of old walls, except for a plant at the base of a wall in Chalybeate Street.
102. P. trivialis. 49. In patch of earth at bottom of a tree.
103. Dactylis glomerata. 4, 5, 20-22, 24, 25, 30-32, 38, 44, 48, 52. In most habitats but uncommon and not flowering.
104. Arrhenatherum elatius. 25. On St. Mary's churchyard wall, where it has spread from the lawn.
105. Holcus lanatus. 8, 12, 13, 17, 19-21, 23, 26, 36, 45, 48, 53. In most habitats but uncommon and not flowering.

106. Agrostis sp. 17, 37, 46, 50. Some young specimens cannot be identified for certain.
107. Agrostis tenuis. 25, 33. On St. Mary's churchyard wall and the low wall outside the Alexandra Road school, where it has spread from the lawns.
108. A. stolonifera. 10, 13, 16, 30, 32, 33, 49. On and at the bases of walls, where it has sometimes spread from lawns, and under gratings and in miniature gardens.

WELSH SALICORNIAS

In view of the difficulties in identifying or checking the identity of herbarium specimens of Salicornia, in future, part of the National Museum of Wales' collection will be stored in spirit.

Fresh, fertile specimens collected during September or October are therefore required from as many Welsh localities as possible. It would be helpful if each specimen could be named as far as possible using the keys in Ball and Tutin's paper in Watsonia 4; p. 193 (1957) or the 'Flora of the British Isles', Clapham, Tutin and Warburg, (1962) or 'Flora Europaea' 1, Tutin et al. (1964).

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HAROLD AUGUSTUS HYDE
(1892 - 1973)

Harold Augustus Hyde died on March 19th, 1973, at the University Hospital of Wales, Cardiff.

He obtained a first in the Natural Sciences Tripos, Parts I & II, at Downing College, Cambridge. He then taught at King Edward's Grammar School, Birmingham (1914 - 1915), Stamford Grammar School, Lincs (1915 - 1917) and, after military service, Tonbridge School, Kent (1919 - 1922).

In 1922 he was appointed Keeper of Botany at the National Museum of Wales, a post he held, and which held his enthusiasm, until his retirement in 1962. The National Museum was a very young institution when Hyde started his career. Its first few botanical specimens were purchased in 1910 but its first major botanical accession was in 1913, when Cardiff Municipal Museum's collection of more than 3,500 mounted specimens was transferred to its keeping. The war years followed and the young Assistant Keeper who had been in charge of the Department of Botany for a very short time, Lieut. C.M. Green, was killed in action. It was not until 1919 that the first full Keeper of Botany was appointed: Dr. Ethel N. Miles Thomas. When Hyde took over, the collection numbered about 25,000 specimens, many of them still awaiting sorting and accession. From this relatively small foundation, he built the Welsh National Herbarium up to a total of nearly 200,000 specimens by the time he retired.

The charter of the National Museum of Wales required the Department of Botany to illustrate the botany of Wales and to assist the other educational institutions of the principality. Hyde took a broad view of these requirements, realising that the botany of Wales could not be studied in isolation. He maintained a policy of building up herbarium collections which gave priority to the native and naturalized flora of Wales but which also contained cultivated specimens and plants from abroad as well as from other parts of the British Isles. As a result the Welsh National Herbarium now has a representative range of specimens for comparative studies and determinations as well as for teaching purposes. Education and lecturing were aspects of his work which Hyde took very seriously. He was an Honorary Lecturer in Economic Botany at the University College of South Wales and Monmouthshire (now University College, Cardiff) and an examiner in Botany for the Diploma of the Museums Association (of which he was a Fellow). He gave many public lectures and was one of the first in South Wales to broadcast on the radio.

During his Keepership the exhibition galleries became well known for their high standard of display and especially for their remarkably life-like model plants, perhaps unique of their kind, at least among British museums. The Welsh National Herbarium acquired a reputation for the willingness and promptness of its response to requests for information and for loans of specimens. Hyde had wide botanical interests but during the latter part of his career he distinguished himself particularly in the field of aeropalynology. In 1941 he began the first day-to-day survey of atmospheric pollen grains and spores to be undertaken in Europe. After his retirement he continued his work as an Honorary Research Associate at the Asthma and Allergy Research Unit of St. David's Hospital, Cardiff. It was during this period that he received his Ph.D., He was the author or co-author of a number of books, including Welsh Ferns now in its 5th edition and considered by many to be the standard work for the whole of the British Isles.

He was elected a Fellow of the Linnean Society in 1926.

Hyde was not an Ordinary Member of the B.S.B.I., but as representative of the National Museum of Wales (Subscriber Member since 1917) he made his contribution in his own way, by placing the facilities of his Department at the disposal of the Society and its individual members and by supporting projects such as the mapping for the Atlas of the British Flora. He was on the Panel of Specialists (for Tilia) for a number of years. Above all else, he provided encouragement and sources of information for Welsh botanists and for anyone interested in Welsh flora. He leaves his wife, Dorothy, a son and a daughter.