

BOTANICAL SOCIETY OF THE BRITISH ISLES

WELSH REGION BULLETIN

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Cardiff, August, 1971

JANUARY 1972 EDITORIAL

This issue contains a variety of topics largely attuned to the Coastal Conservation theme which was also that of The Council for the Protection of Rural Wales at the Aberystwyth Conference in March 1971 and which must continue to be one of dominant interest.

In this context we must view with mixed feelings the last two major decisions of the Minister for the Environment which concern us in Wales. The first; to forbid the acquisition of the Pembrey and Towyn Burrows by the Ministry of Defence, is welcomed with the strong proviso that the land so spared be sympathetically administered and not exploited. The M.O.D. can be a good Gate-Keeper for vulnerable areas but its latterday proposal to build an estuarine sea wall would have brought disaster to the dune slack and salt marsh ecologies and have destroyed the intensely interesting natural process now transforming the estuarine point by erosion and redeposition. Here you may see infant dunes in act of nativity.

The other decision - to allow drilling in the Mawddach estuary must be utterly deplored.

The provision of information for the defence of all areas of especial botanical interest is a matter of urgency since threats can arise overnight. All members of the B.S.B.I. can contribute to a documentary of defence and by no means all areas of interest are discovered. For those prepared to go into the Witness Box, the Council for British Archaeology held a Conference on the subject of evidence at Public Enquiries and the papers will be published.

Annual General Meeting, 18th September 1971 (Cont.)

AGENDA

1. Minutes
2. Matters arising.
3. Chairman's address.
4. Secretary's report.
5. Election of Officers -
 - (a) Chairman
 - (b) Vice-Chairman
 - (c) Hon. Secretary
 - (d) Minuting Secretary
 - (e) Committee Members

The following Senior Committee Members retire and are eligible for re-election - W. Condry; Miss J. Macnair; R.H. Roberts; M. Porter; Mrs. I.M. Vaughan.

NEWS FROM B.S.B.I. COUNCIL

Our Regional Representative, Dr. W.S. Lacey, reports that at its last Meeting in London on March 23rd. the B.S.B.I. Council agreed to a change in our Constitution which will allow us to hold our Regional A.G.M. at any time in the year. It also agreed to a substantial increase in the funds provided centrally for Regional expenses.

PLANTS OF THE DENBIGHSHIRE COAST

Although Denbighshire has a coastline about twelve miles long, it has very little of what we regard as coastal vegetation. Many species of the coast do grow here and there, but in only one small area is there anything like a natural coastal community. To some extent this sparseness is the result of erosion by the sea but largely it is due to man's activity.

A hundred and fifty years ago a visitor walking westwards along the shore from Foryd at the mouth of the River Clwyd would have passed the long lines of sandhills that bordered the huge marsh of Morfa Rhuddlan. Past Towyn he would have come to a low-lying area flooded at times by the sea. He might have heard that the sea was steadily eroding the fields and he could have seen the submerged trees off-shore at Pensarn. Further on where the hills approach the shoreline, the land rises more steeply from the sea, and from here to the limestone mass

Now the seawall, the caravans, the houses and the amusement fairs cover over eight miles of the coast. Penmaen Head has been largely quarried away and is now a dump for old cars and such rubbish. Abergele's bin tips have covered over half a mile of the strand with a layer of household refuse ten feet deep. The shingle ridges on the shore at Pensarn are furrowed by the cars of the holidaymakers and flattened by the tracks to the caravans. It seems that only the boulder clay cliffs are more or less unchanged.

Small pockets of the coastal plants still persist. At Foryd among the bungalows and the holiday camps is a sandy patch of two or three acres. It is all that remains of the dunes, and while all traces of a dune system have gone one can still see there some of the dune plants; marram grass, sand sedge, sea holly, restharrow, sea rocket, buckshorn plantain and a few others.

At Towyn just behind the sea wall there are some brackish ditches and in them grow the mud rush, sea clubrush, sea plantain, sea aster, scurvy grass and sea milkwort.

The shingle banks at Abergele are perhaps the least affected so far of the true coastal areas, but they are much visited by holiday makers. The yellow horned poppy grows there with seakale, kidney vetch, sea campion, stinking groundsel, dewberry and many others.

The cliffs of glacial drift are still being cut away by the sea. Their communities are not really coastal, but they are quite unspoiled. Much of them is covered by an impenetrable scrub but where small landslips keep the vegetation open one can find the great horsetail, yellowwort, hemp agrimony, hoary ragwort, centaury, the scented pyramidal and spotted orchids and many others.

Elsewhere there are only isolated plants of maritime species: a clump of the sea clubrush at Old Colwyn, for example. But plants will colonize what seem unlikely sites, and in crevices in the seawall and promenade you can see sea pearlwort, cliff sandspurrey and Danish scurvy-grass. If the coastal species are restricted now we can list among the plants of the Denbighshire coast such plants as Sisymbrium orientale, Diploaxis tenuifolia, Cardaria draba, Thlaspi alliaceum and other adventives which flourish on Abergele's rubbish.

From what we see now it is hard to suggest what might have grown here in the past. It seems that Denbighshire's coastal flora was almost exterminated before we became aware of it. The factors which caused its

WELSH COASTAL VEGETATION (Cont.)

Newborough Warren N.N.R.. Drainage and forestry operations, largely since the Second World War, have caused changes in the pattern of substrate deposition. Increased shelter and rise in level have enabled Puccinellia maritima and other plants to colonize a previously bare area of sand and by 1956 nearly five hectares of new marsh had developed. The new marsh has since been invaded by Juncus maritimus and Spartina anglica (the vigorous amphidiploid ($2n=126$), said to have originated naturally from S. x townsendii by chromosome doubling).

The whole area is unstable and dynamic; in particular the spread of Spartina seems certain to change the character of the marsh very considerably. The authors give an extended description of the vegetation, using species lists, aerial photographs, maps and graphs, and include brief accounts of soils, geology and drainage. In addition, a list of no less than 130 birds seen on the marsh and surrounding tidal sand flats is included.

C.P.R.W. CONFERENCE 1971

National Museum of Wales exhibit, staged jointly by the Departments of Botany and Zoology, showed examples of the zonation of brown seaweeds and molluscs to be found between the highest and lowest spring tide levels on a rocky shore. Pelvetia, covered by less than 60% of all high tides, Fucus spiralis, Ascophyllum, Fucus vesiculosus and F. serratus, down to Laminaria which is rarely exposed by low tides, are characteristic seaweeds of this zonation. The molluscs show a similar, but sometimes broader zonation. The seaweeds were preserved especially for this exhibit, by soaking in glycerine. The molluscs were represented by their empty shells.

PLANTS OF PEMBROKESHIRE (Cont.)

The first section deals with the description of the county which includes an introduction to climate and geology, an interesting discussion on habitats and distribution and a short history of botanical exploration in the county. This is followed by an account of the history and present status of the Tenby daffodil (Narcissus obvallaris), in which the dangers that face commercially exploitable plants are well illustrated.

The largest part of the flora is taken up by the systematic list of species. The sequence follows that of Dandy's "List of British Vascular Plants". The nomenclature mainly follows Dandy's List or recent revisions. Synonyms are conspicuous by their absence and although this is probably through lack of space, it is a pity that they are not provided for some of the more obscure name changes that have taken place recently, such as Cerastium fontanum ssp. triviale (Murb.) Jalas for Cerastium holostioides, and Ranunculus penicillatus (Dum.) Bab. for R. aquatilis ssp. pseudofluitans (Syme) Clapham, etc.

The English names are taken from a provisional list drawn up by a working party of the B.S.B.I., which will eventually be published as a standard list of English names, so here we have a foretaste of what is to come. The names are in the most part agreeable and it is to be hoped that all local flora writers will use this list when published.

The distribution of the less common and rare species is shown by locality name and 5 km grid square reference. A useful feature is an indication of the location of voucher material. Subspecies are included where appropriate, together with many hybrids.

Eleven plates are included which unfortunately have not reproduced well. The plates are unnumbered and two are transposed, the Slender Thistle and Rock Spurrey/Parsley Fern. The list of plates is included with the contents at the front of the book.

Mr. Davis is to be congratulated on having compiled such a useful and comprehensive book, which, at 50p, is extremely good value for money and should be on the shelf of every Welsh, if not British, botanist.

GWYNN ELLIS

ALL THAT DENBIGHSHIRE HAS LEFT

THESE ARE THE AREAS WHERE THE REMAINING COASTAL VEGETATION CAN BE FOUND.

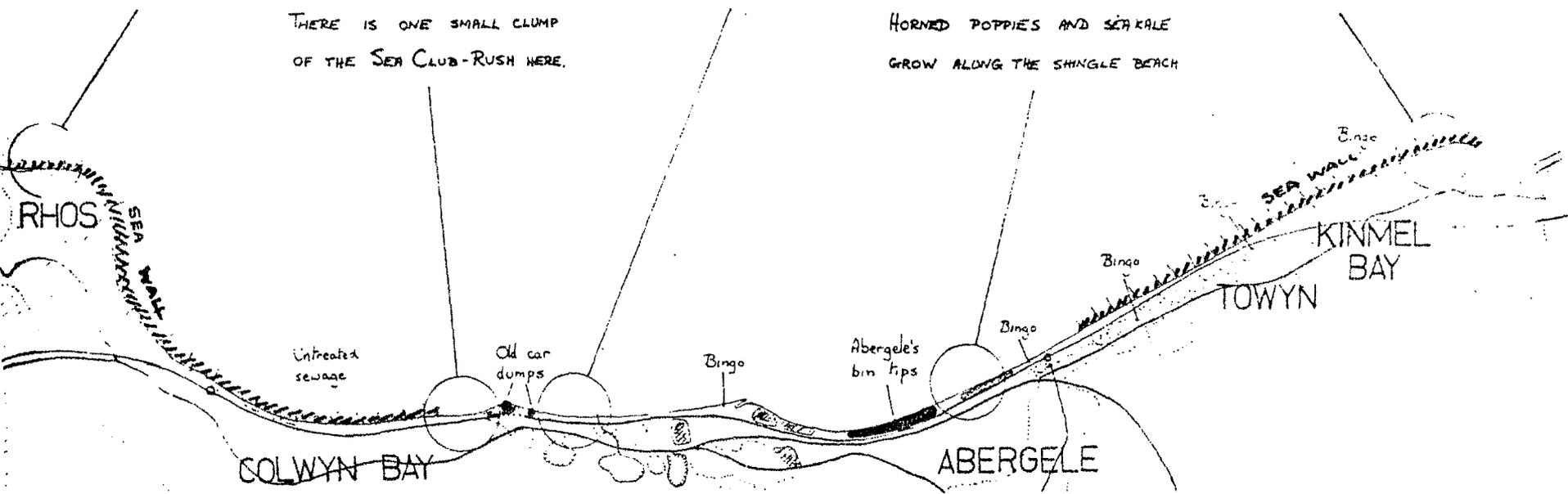
BUCKSHORN PLANTAIN AND SCURVY GRASS GROW IN CREVICES IN THE SEA WALL.

THERE IS ONE SMALL CLUMP OF THE SEA CLUB-RUSH HERE.

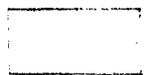
CLIFFS OF GLACIAL DRIFT SUPPORT SCRUBBY THICKETS AND COARSE GRASSLAND.

HORNED POPPIES AND SEA KALE GROW ALONG THE SHINGLE BEACH

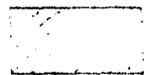
MARRAM GRASS STILL GROWS ON THE LAST REMNANTS OF THE SAND DUNES HERE.



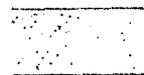
KEY



BUILT-UP AREAS



FIELDS AND WOODS



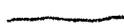
CARAVAN PARKS + HOLIDAY CAMPS



QUARRIES



MAIN ROADS



RAILWAYS

SEA WALL

SCALE : [1 MILE]