

IRISH BOTANICAL NEWS

Number 1

February, 1991



Edited by: Dr Brian S. Rushton, University of Ulster
Coleraine, Northern Ireland, BT52 1SA

Published by: The Committee for Ireland
Botanical Society of the British Isles

Committee for Ireland, 1990-91
Botanical Society of the British Isles

Elected at the Annual General Meeting, held in the School of Botany, Trinity College, Dublin on 6th October, 1990 (office bearers were subsequently elected at the first Committee meeting):

Dr T.G.F. Curtis, Chairman
Mr D. Doogue, Secretary
Mrs Sylvia Reynolds, Field Meetings Secretary
Mr C. Breen
Mr J.C.L. Phillips
Miss Maura J.P. Scannell
Dr Micheline Sheehy-Skeffington

The following are also members of the Committee:

Mr S. Beesley, Council Representative
Mr R. Wyle, Department of the Environment (Northern Ireland)
Representative
Dr B.S. Rushton, Co-opted
Mr P. Grant, Co-opted

Irish Botanical News is published by the Committee for Ireland, Botanical Society of the British Isles and edited by Dr B.S. Rushton.

© Dr B.S. Rushton and the authors of individual articles, 1991.

The cover illustration was kindly provided by Mrs Joan Crichton. It shows a joint meeting of the Fern Society and the B.S.B.I. at Peakadaw, on the south side of Glenade, Co. Leitrim.

EDITORIAL

Little did I know that 15 months ago when I innocently suggested at the A.G.M. that Irish botany could do with a newsletter to report its activities and publish notes and articles of a general nature that I would be writing the Editorial today. The suggestion was enthusiastically received and has been well supported by the Committee for Ireland. It hasn't been all plain sailing – publishing never is – but I've thoroughly enjoyed the correspondence and personal contact that putting together this newsletter has brought. There were no particularly inspiring suggestions for a name for the newsletter and so the Committee decided on *Irish Botanical News*.

As I outlined in my original letter, its future success lies in your hands. I was pleased to receive two main articles and these together with two of the papers presented at the A.G.M. represent the 'meat' of this issue. BUT, KEEP WRITING!! It would be great to have next years issue devoid of Committee names other than the list on the inside of the front cover! Letters, short notes, articles, anything considered! I am particularly looking for cover illustrations and original botanical cartoons (the cartoon on page 11 was done by Sylvia Reynolds' son, so encourage the younger generation).

The questionnaire sent out earlier produced a good response but some did not reply. Since we will not be putting this register of Irish members together until the spring I've included a copy for those of you who didn't return the original. My apologies for bothering those of you who did.

Have a good field season,

Dr Brian S. Rushton, Editor, *Irish Botanical News*.

THE ROLE OF THE B.S.B.I. IN THE FUTURE

A paper presented to the Irish A.G.M., October, 1990

Gwynn Ellis

Department of Botany, National Museum of Wales, Cardiff, CF1 3NP

My brief, when asked to speak at the Irish A.G.M., was to give my views on what the B.S.B.I. should be doing in the future and to be as controversial as I liked. One of my interests is alien plants and a topic involving them would be both timely and controversial. Timely, because I have long felt that alien plants have not received the attention they deserve; controversial, because aliens always are, plant, animal or human!

Why my interest in aliens? – simply because we can never tell which of today's waifs and strays will be tomorrow's *Reynoutria japonica*, and I believe that we should be making every effort to keep track of their occurrence and spread.

There are numerous examples of aliens which are now an established part of the British and Irish floras, which started out as one or a few isolated escapes from gardens or chance introductions, but we have no idea of their initial rate of spread. Some examples from the past and from the present will illustrate the problem, and will be followed by a suggestion as to how we might do things in the future.

In 1698, Edward Llwyd, that noted Welsh botanist and antiquary, expressed surprise, in a letter to Dr Richard Richardson, that *Anaphalis margaritacea* "should grow on the banks of the Rymmny [Rhymney] river for the space of at least 12 miles, and yet not a plant of it to be seen elsewhere throughout Wales" (Gunther 1945).

This was the first recorded occurrence of this species from outside gardens in the British Isles. Pearly Everlasting is a North American plant which was originally introduced into gardens in the 16th century. It has since escaped from cultivation in various parts of Britain, and is now fairly widespread on railway banks, walls, sand dunes and waste places, at least in South Wales.

Another species seen by Llwyd at much the same time was Red Valerian, *Centranthus ruber*, on walls of Margam Abbey in Glamorgan. It was introduced to British gardens from Southern Europe, and Gerarde (1597) mentions that it "Groweth plentifully in my garden, being a great ornament to the same, and not common in England". It seems to have remained a not very prominent member of our flora, and a common cottage garden plant, until the 19th century, by the end of which it had become abundantly naturalised in the South and East. Today it is a common sight (in white, red and pink colour forms), as it grows in great abundance on sea cliffs, walls, railway banks and waste ground.

Pineapple Weed, *Matricaria matricarioides*, a native of North-east Asia, was first recorded from Britain in 1871, and does not appear to have spread very rapidly at first. Although recorded from several counties in Britain and Ireland before 1900, it was not until the first quarter of this century that it spread explosively along roadsides to reach almost every vice-county. The agent of this spectacular increase in its range was probably associated with the increasing use of the motor car. Salisbury (1961) has pointed out that its seeds are dispersed in mud particularly that adhering to the tyre tread of cars and lorries. They could be carried for quite long distances before the mud dried sufficiently for it, and the seeds to fall from the tyre. It is worth remembering that in the early years of this century, roads were not metalled and in wet weather, mud was everywhere.

The railways have also played a part in seed dispersal and in assisting the spread of native and alien plants. The seeds of *Centranthus ruber*,

unlike *Matricaria matricarioides*, have a pappus of hairs, and the spread of this species in the 19th century may well have been assisted by the draught from passing trains, as was certainly the case with that classic example, *Senecio squalidus*, the Oxford Ragwort, but that story is too well known to be repeated here.

We have here, therefore, three alien species, two garden escapes and one introduction, that arrived on these shores between the 16th and 19th centuries. They found conditions here to their liking, and after an initial stage of consolidation, proceeded to spread to many parts of Britain, but it is unfortunate that we have no detailed records of their spread. We can perhaps draw up some rather coarse maps showing vice-comital spread by plotting published records, and those from herbaria. But this would be inexact and there would be many omissions.

Does it matter if we do not know all the details about the spread of these aliens? Perhaps for the three mentioned above, it does not matter all that much; none are serious invasive pests. But what if they were? What if these aliens spread explosively into native habitats and displaced native species? Surely then it would be useful to know at the beginning that this was happening and to take steps to prevent or at least slow down the invasion.

Now for a 'Fairy Story' – Once upon a time Japanese Knotweed was a much prized and sought after garden plant that was even described as “undoubtedly one of the finest herbaceous plants in cultivation” (Anon. 1879). Strange, unbelievable, but true.

Japanese Knotweed, *Reynoutria japonica*, is native to Japan, Taiwan and northern China and was first introduced to Britain, as a garden plant, in 1825. Like many other aliens, it seemed to go through a quiet non-invasive phase to begin with, and it was not until about 1885 that it was first recorded as establishing itself in the wild (Conolly 1977), and as we all know it is now a pernicious weed in many

parts of Britain and Ireland.

Aliens are obviously visitors from other parts of the world, and they have not always brought with them on their travels all of their sexual accoutrements. Many are male or female sterile and thus fail to set good seed. This is especially true of *Reynoutria japonica*, which in Japan is partly hermaphrodite, but in Britain is 100% male sterile and consequently its spread must be by dispersal of vegetative fragments.

A similar story to the spread of *Reynoutria japonica* is provided by *Rhododendron ponticum* except that this species is fully fertile in Britain and Ireland. It is thought to have been introduced from the Mediterranean region in 1763 and was soon grown extensively as an ornamental shrub and as a ground cover for pheasants, both in woodland and in the open. There are very few records of its spread, although we know that it was recorded from Ireland in 1843, and by 1849 from Hampshire and South Wales. Its success as an invasive species, parallels that of *Reynoutria japonica*, but is perhaps even more of a menace. *Reynoutria* is mainly an invader and coloniser of disturbed or man-made habitats, whereas *Rhododendron* invades natural habitats. Gritten (1990) has recently pointed out that in the Snowdonia National Park, *Rhododendron ponticum* covers 1.6% of the total area of the park, or some 3400 ha, where its principal habitats are broad-leaved woodland, conifer plantations and open mountainside.

Another invasive nasty, is arguably one of the most attractive plants found in the British and Irish floras, *Impatiens glandulifera*, the Indian or Himalayan Balsam. This species, native to the Himalayas was introduced to Britain as a garden plant in about 1839. Again there was an initial period during which there was apparently no widespread escape into natural habitats, but by 1855 it was recorded as naturalised in Middlesex. It spread rapidly and was given weed status as long ago as 1898, less than 60 years after its first introduction

into gardens. It is now well established on river banks in many parts of lowland Britain where it finds the silt left by river flood water an ideal habitat which in some respects is similar to that favoured by the species in its native Himalayas.

I could have included many other plants in this invasive noxious weed category, and I do find it impossible to end without a brief mention of that giant amongst herbaceous plants, *Heracleum mantegazzianum*, Giant Hogweed. This was introduced to gardens from the Caucasus in 1893 and is a prolific invader of river banks.

The point I am trying to make with these examples, is that for all of these alien species, some now serious, noxious weeds and a threat to native plants and to the landscape, we have no detailed maps showing their establishment in the British flora, or monitoring their spread.

There have been sterling efforts by some botanists – notably Anne Conolly for Japanese Knotweed (Conolly 1977) – to remedy this lack by producing maps from the meagre records published in local Floras, extracted from herbaria, and elsewhere. These can be very useful and informative, but how much more satisfactory it would have been if the spread of these weeds had been monitored at the time, when they first started to show their invasive tendencies. This might have given us advanced warning of any explosive spread and steps might have been taken sooner to try and halt the weed's progress. In many cases it is now too late. Japanese Knotweed, for example, has such a hold in many areas that nothing will shift it.

But it is not all doom and gloom – there is at least one modern success story, where a relatively recent introduction, has been monitored in detail, its threat to native species and habitats publicised, and steps taken to control it. The species in question is an aquatic weed, *Crassula helmsii*. First introduced into Britain before 1914, but only commercially available to aquarists since 1927, it followed the now

familiar pattern of lying low for a while. It was not until the mid-1950s that it was found naturalised in Essex, and not until the late 1970s and early 1980s that many records of it becoming naturalised started to appear. It is fortunate that Hugh Dawson of the Institute of Freshwater Ecology took an interest in this species, monitored its progress and spread as it was happening, and has written numerous papers as well as *Crassula Watch* newsletters which are sent to all interested persons.

With this splendid example of what can be done as regards monitoring the naturalisation, spread and potential threat of an alien species, I believe that we ought to start seriously considering monitoring all alien species so that any that threaten to get out of hand can be pinpointed at the start of their invasion.

I venture to suggest that what we need is an ALIEN REGISTER – a means whereby details of newly discovered aliens which appear to be becoming established and may spread, can be sent to a central point. If such an Alien Register were to be set up, a short paper could be prepared, giving a description of the alien, ways in which it can be identified in the field, an illustration, the sort of habitat it grows in and any other relevant details. All this could be published in *B.S.B.I. News* with a request for members to keep a look out for it.

One stage further would be the setting up of a special interest group – rather like the '*Hieracium* Study Group' whose members could each adopt one or a group of aliens and take over responsibility for monitoring their spread.

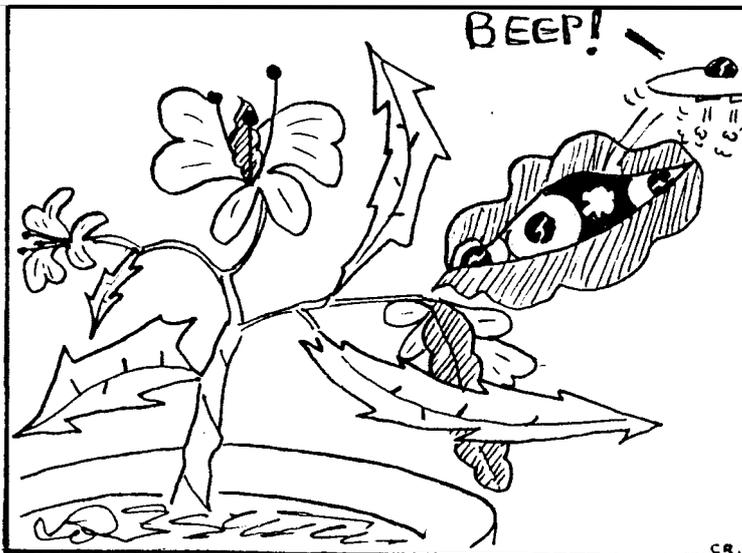
It is also necessary to consider the threat of global warming. If this does occur, and the signs seem to be indicating that it will, to some extent at least, then the B.S.B.I. could be in at the forefront of monitoring the change in vegetation if an Alien Register is up and running. With higher temperatures, the flora of Britain will slowly migrate northwards, and new alien species will invade from the south.

I say that we must be ready to meet this new challenge, and that means acting NOW. WHO KNOWS? – PERHAPS THE INVASION HAS ALREADY STARTED.

References

- Anonymous [C.M.] (1879). The Knotweeds. *The Garden*, no. 418 (22.11.1879).
- Conolly, A.P. (1977). The distribution and history in the British Isles of some species of *Polygonum* and *Reynoutria*. *Watsonia* **11**: 291-311.
- Gerarde, J. (1597). *The Herball*. London.
- Gritten, R. (1990). The control of invasive plants in the Snowdonia National Park, in *The Biology and Control of Invasive Plants*. Industrial Ecology Group of the British Ecological Society, Conference Report.
- Gunther, R.T. (1945). Life and letters of Edward Llwyd. *Early Science in Oxford* 14. Oxford.
- Salisbury, E. (1961). *Weeds and Aliens*. London.

WATCH
OUT
FOR
ALIENS!



THE FUTURE ROLE OF THE IRISH REGIONAL BRANCH OF THE B.S.B.I.

A paper presented to the Irish A.G.M., October, 1990

J.C.L. Phillips

110 Crawfordsburn Road, Newtownards, Co. Down, BT23 4UJ

In order to consider the possible future role of the Irish Regional Branch of the B.S.B.I. in nature conservation in Ireland it is necessary to consider the relative strengths and weaknesses of the various statutory and voluntary organisations in this field. My knowledge of these is much better in the North of Ireland than in the South and therefore I will concentrate on that and draw parallels where I can. It is also necessary to consider our own resources, the central policy of the Society and major projects such as the *Atlas of the British Flora* and Monitoring Scheme in which we were all involved. The Society has had a policy that while conservation is one of its concerns it should be subordinate to the main aim of advancing our understanding of plant distribution and systematics. Currently there are no major projects in hand and therefore in theory at least there may be some available capacity for local initiatives.

The strength of the statutory authorities, the Wildlife Service of the Office of Public Works and the Conservation Service of the Department of the Environment, Northern Ireland lies in the legal powers given to them to conserve our wildlife. Their weakness lies in the imbalance between the major responsibilities they carry and the fairly meagre resources available to them particularly in terms of staff. The woefully slow rate of Areas of Special Scientific Interest declaration in the North is a direct consequence of this. Could our Regional Branch assist with the gathering of botanical information

in the field as was indeed suggested recently in connection with Areas of Scientific Interest in the South?

To turn to the voluntary organisations. There are four main nature conservation organisations operating in Northern Ireland and in order of membership size these are:

1. The National Trust with a membership approaching 20,000, some 2,000,000 in the U.K. as a whole and a large expert professional staff including biologists charged with nature conservation responsibilities. Through its own properties and schemes such as the Strangford Lough Wildlife Scheme the Trust plays a major role in nature conservation and with its large membership is in a powerful position to lobby Government. The equivalent organisation in the Republic is An Taisce which has a statutory role in some development proposal consultation.

2. The Royal Society for the Protection of Birds with some 5,000 members in Northern Ireland (800,000 in the U.K. as a whole) and ten full time staff. A powerful and well organised lobbying body not only in the U.K. but also in Brussels. The Irish Wildlife Conservancy is the equivalent.

3. The Ulster Wildlife Trust which with the County Trusts in England and Wales and the Scottish Wildlife Trust has the Royal Society for Nature Conservation as a coordinating and parent body. The U.W.T. has some 1,500 members and some ten full time staff some on temporary terms. Again an effective lobby, the equivalent being, I presume, the Irish Wildlife Federation.

4. Conservation Volunteers (Northern Ireland) is an arm of the British Trust for Conservation Volunteers and concentrates on training and using voluntary labour to carry out practical conservation tasks in the countryside. They have a very competent professional and enthusiastic staff. As a policy they do not lobby.

In addition to these organisations there are a number of field clubs, pre-eminent being Dublin and Belfast, specialist groups interested in birds, butterflies, dragonflies, mosses, etc. and local pressure groups campaigning for local conservation issues. Perhaps somewhat peripheral to nature conservation there is also the Ulster Society for the Preservation of the Countryside whose main concerns lie with landscape amenity and public access.

It is perhaps interesting to note that in those organisations which cover the U.K. as a whole the Northern Ireland membership is only about a third in percentage of population terms compared to that of the U.K. I suspect that membership of similar organisations in the Republic is even lower.

Where do we in the B.S.B.I. fit into this picture? Our membership in Ireland is approximately 120, so in numerical terms we are very small. What we do have is a high percentage of professional and expert amateur botanists in our membership. This is in total contrast to the membership of the big battalions where the, often emotional, desire to support conservation which caused the majority to join is not coupled to any expert knowledge. How can this special quality of our membership be best used? We are short on manpower but long on botanical expertise and we should aim to exploit this strength and not waste it by taking on general conservation work better tackled by those with greater numbers and resources. I do not feel therefore that we should enter the lists as a general conservation lobbying body, this is something better done by the big battalions. What we should try to ensure is that where such campaigns have a botanical element those fighting the conservation cause have the benefit of any botanical knowledge or expertise we can supply. We can also try to ensure that the campaigning bodies are aware of development proposals which have botanical importance. I imagine many of us are also members of one of these campaigning bodies and thus work under their banner if we so wish. Likewise I do not feel we have the

resources to involve ourselves in public education or nature reserve ownership though we can offer botanical advice to those that are. How much we can do in these supporting roles will depend greatly on the ability and the willingness of individual members to get involved in conservation matters.

There are some specific issues such as pressing for an effective biological recording centre for Ireland (run by the Wildlife Service) which I feel we should take up and, for example, commenting on lists of protected plants in draft legislation is something we are well qualified to do.

To turn now to projects which I would suggest the Irish Regional Branch of the B.S.B.I. could consider taking on and encouraging members to help with.

Firstly, the *Irish Red Data Book* on vascular plants is due for revision in 1993 which will require up-dated information on the distribution of some 200 species. This is an exercise which we could offer to help with given the necessary basic data by the statutory authorities and one which I feel many members would find interesting and rewarding. Checking sites for specific species is something even the less expert of us could do.

Secondly, it was suggested at the recent Recorders' Conference at Lavistown that the Wildlife Service would welcome assistance with botanical surveys in Areas of Scientific Interest. Again an interesting and rewarding task and perhaps similar help with Areas of Special Scientific Interest in the North would be welcome.

Thirdly, the work of producing conventional county Floras is daunting but perhaps a simpler check-list would serve the conservation cause nearly as well.

Lastly, there are some plants in Ireland with particularly interesting

distributions either in their own right or as indicators of particular habitat types. What about a project on *Neotinea maculata* for instance whose range seems to be increasing and I suspect is often missed due to its short, early flowering period?

Finally, of course, we should be encouraging those with an actual or potential interest in our botanical work to join. Our likely recruiting areas are the universities and colleges as well as among the membership of more general amateur naturalist bodies such as Field Clubs. To do this we need an attractive programme of meetings which I believe we have and some written publicity which perhaps this newsletter will help to provide. Personal contacts by existing members are likely to provide the main stimulus to others to join.

A REPORT ON THE FLORA OF CORK (V.CC. H3-H5), 1990

Miss Maura J.P. Scannell

Several brief visits were made to Cork in 1990. The urban flora was observed and aliens about the Port of Cork were collected. The species noted between Kent Station and the western limit of the port included *Descurainia sophia*, *Thlaspi arvense*, *Viola arvensis*, *Chenopodium album* f. *glomerulosum*, *Amaranthus* sp. (probably *retroflexus*), *Briza maxima* and a mature tree of *Ficus carica* (Fig) in an angle between two boundary walls of the station a short distance away from an unloading area. I believe it to be self sown and part of the alien flora.

When working a rural part on the south side of the city on the Kinsale Road, *Trifolium hybridum* was collected from the banks of the Tramore River.

In connection with the scheduled B.S.B.I. field meeting at Abbeyfeale to work south Limerick and North Cork an early visit was made by the two leaders, myself and Sylvia Reynolds, in May. *Euphorbia hyberna* was seen in great abundance in the valley of the River Feale. At the later meeting the south slopes of the Mullaghreirk mountains provided few areas of botanic interest. Bluefort or Blueford bog mentioned by the Rev. T. Allin in 1883 was located in 1989 and *Carex curta*, new to the flora of Cork county, was found. The bog was visited again in 1990 and the sedge was found in some quantity but there was no sign of *Carex limosa*.

In July some days were spent east of Castlelyons and the riparian flora of the River Bride was sampled at Aghern and other locations. *Heracleum mantegazzianum* and *Impatiens glandulifera* were found in many areas. *Rubus* specimens were collected. Bluefort was again visited and an upland area west of Newmarket village. *Carex limosa* was again sought without success. Forestry is now encroaching on the northern rampart of the bog which may have been more extensive in Allin's time. *Salix x smithiana* not previously recorded for H4 was collected as were many specimens of *Rubus* to be despatched later to D.E. Allen.

A check-list for H5, East Cork is in preparation.

A REPORT ON THE FLORA OF CORK (V.CC. H3-H5), 1990

T. O'Mahony

Fieldwork this year was very restricted time-wise and that undertaken was confined to Mid and East Cork.

In May, *Veronica crista-galli* was found near Mallow the first Cork

site north of the River Blackwater. Other May finds included *Symphytum tuberosum* and *Mercurialis perennis* – the *Symphytum* being new to the Cork flora, the *Mercurialis* new to Mid Cork. Both are obvious introductions but are well naturalised.

Detailed examination of Bluebell populations showed the hybrid *Hyacinthoides hispanica* x *H. non-scripta* to be widely naturalised in the county. Two nothomorphs occur, the *H. non-scripta*-like hybrid being by far the most frequent. Indeed forms of this could easily be mistaken for our native bluebell, the inflorescences being somewhat pendulous and subsecund. The second taxon is very distinct with its erect inflorescences and campanulate flowers, etc. It has every appearance of being *H. hispanica*, same that its flowers are very sweet scented, whereas those of *H. hispanica* (according to *Flora Europaea* 5) are stated to be scentless. I intend to pursue this matter further in May, 1991.

Since 1987, the defunct Cork-Crosshaven railway line in Mid Cork has been converted into an amenity walkway, and in the process the area has been disturbed to a certain extent. From May to September the Blackrock section of the line was surveyed intensively, as it is convenient to my place of work. Three interesting hybrids were found here, whose existence is directly attributable to the disturbance factor. The hybrids in question are:

1. a single tussock of *Carex divulsa* x *C. muricata*, this being new to H4;
2. two tussocks of *Carex divulsa* x *C. remota*. This is only the second Cork and Irish station for this rare sedge hybrid. As far as I can ascertain, it has not been reported from elsewhere in Europe since 1924; and
3. a single multi-stemmed plant of *Epilobium ciliatum* x *E. obscurum*. This hybrid which appears to be new to the Irish flora also occurs in the grounds of the nearby Clover Hill Nursery. Most fruit capsules were found to be short and abortive. Similarly most seed is

also abortive though occasional seeds are fully developed and apparently viable. Should fertile F₂ plants ever arise they might well blur the morphological boundaries between both species.

Lastly, further work on *Epilobium* taxa in 1990 shows that *E. tetragonum* subsp. *tetragonum* is now well established in a few Mid Cork and East Cork sites. It will be most interesting to see if this species eventually becomes as abundant about Cork City as is *E. ciliatum* at present. Similarly, Rosebay Willowherb (*Chamaenerion angustifolium*) is now spreading dramatically in Mid and East Cork. Most of the new sites are near forests and forestry activities are definitely assisting its spread at present. It seems very likely that this handsome but aggressive weed will become at least a locally familiar sight in Co. Cork in future years.

A REPORT ON THE FLORA OF LIMERICK (V.C. H8), 1990

Sylvia Reynolds

Apart from Mullaghareirk Mountains, Bruree and Castletown which were visited during the B.S.B.I. field meeting, several other new areas were botanized in 1990: a quarry on the east side of the Slievefelim Mountains, the Bilboa River where Praeger had collected records in 1900 for *Irish Topographical Botany*, and a bog on the Limerick-Tipperary border (mostly in H10) with *Rhynchospora alba*, *Utricularia minor* and *Osmunda regalis*. A site with *Schoenoplectus triqueter* on the Shannon west of Limerick City was also checked. This protected species was thriving on intertidal muddy banks with *Phragmites australis*, *Scirpus maritimus*, *Rumex crispus* var. *uliginosus*, etc. Alien plants were again investigated at Foynes and Limerick ports and on roadsides in the county. New finds included *Datura stramonium*, *Echinochloa crus-galli* and two odd *Chenopodium* spp., one of which

had very narrow leaves.

A PROPOSED CHECK-LIST FOR CO. WEXFORD (V.C.12)

J. Akeroyd and Rosemary FitzGerald

Co. Wexford has no Flora, and published records since Praeger's *The Botanist in Ireland* (1934) are not abundant. While detailed recording of the county is proceeding, we plan to produce an interim check-list in 1992, to summarise both current and historical records. This will be informally produced, with the intention of focusing interest on further work in this botanically rewarding county. Records post-1970 are being collected on a 5 x 5 km basis. During the 1989-90 field seasons more than 20 first vice-county records have been made, including *Brachypodium pinnatum*, *Ceratophyllum demersum*, *Geranium pusillum*, *Hordeum murinum*, *Lotus subbiflorus*, *Littorella uniflora*, *Potamogeton obtusifolius* and *Vaccinium oxycoccos*. There have also been encouraging refinds of rare species such as *Carex divisa* (last seen in the 1940s). A Wildlife Service contract to survey the 'Protected and Threatened' species in the county has given valuable consolidation to rare plant records and site assessment, and the success of this survey, and of a B.S.B.I. meeting in N.E. Wexford, indicate that many more good finds may be made. We would be most grateful if botanists visiting the county, or holding interesting past records, would contact R.F. at Borris House, Borris, Co. Kilkenny.

A REPORT ON THE FLORA OF ANTRIM (V.C. H39)

S. Beesley

Over the years, the flora of Co. Antrim has been well-worked by Irish standards and the new edition of the *Flora of the North-East of Ireland*, covering Antrim, Down and Londonderry, is being prepared. However, there is nothing to indicate the present distribution of plants on a 10 km square basis.

The recent Monitoring Scheme Survey (1987-88) covered five of the 46 10 km squares in Co. Antrim and surprised many recorders by the number of species recorded in squares which were thought to be very ordinary.

I am now working towards an updated recording for all 10 km squares in Co. Antrim using 1986 as the start date so that the Monitoring Scheme results can be incorporated.

There is much talk of climatic change and if this comes about there will no doubt be corresponding change in the flora. The present work should provide a sound basis from which changes can be assessed. Although the work is being directed initially towards a check-list on a 10 km square basis the record cards are being completed for smaller areas and so are available for future distribution work on a 1 km square, tetrad, or 5 km square basis. Records are computerised in such a way that the integrity of individual record cards is retained.

About 300 record cards have been completed during the last four years and it is envisaged that the main recording work can be completed by 1992 with preparation of a draft check-list shortly afterwards. It is hoped that the draft check-list will encourage interest in the project and will result in additional records so that a final

check-list can be completed by 1994/5.

At present, almost all the recording is being carried out by myself, either alone or with John Wilde whose help and companionship are much appreciated.

It would of course be extremely helpful if anyone having recent plant records for Co. Antrim would let me have them for inclusion.

THE EDUCATION OF A VERY AMATEUR BOTANIST

Helen D. Megaw

22 Dunamallaght Road, Ballycastle, Co. Antrim, BT54 6PB

I had no formal education in botany except for about six months at the age of 17. But I never remember a time when I did not know the common flowers – daisies and dandelions and buttercups. My mother was very fond of flowers, and must have taught me their names almost as soon as I could talk.

My first specific memory can be dated to the year when I was five. The previous year we had taken a house for August in Ballycastle, Co. Antrim. It was one of two big ungainly houses on the shore road that backed on to the cliff behind, where the water tank supplying the house was sited. The next summer, when I was six, we went back again, and I immediately rushed out to the back, to look for the Grass of Parnassus (*Parnassia palustris*) which I must have learned to recognise and become fond of the previous August. But this year we had gone in July and there was no Grass of Parnassus – only something new and exciting – a discovery whose memory stayed with me! I learned it was Butterwort (*Pinguicula vulgaris*)!

My first flower book, given to me sometime soon after, was *Flowers Told to the Children*, a lovely little book in a very good series, with good coloured illustrations of all the simpler and commonest wild flowers. From that I went on to Johns' *Flowers of the Field*, having found a copy on my grandmother's bookshelves, which she gave me. Unfortunately, it was an imperfect copy; a large section dealing with the grasses had been left out by the binders, and replaced by a repeat of an earlier section, bound in upside down. This completely frustrated any attempt on my part to learn the grasses, except the common agricultural ones like Cock'sfoot (*Dactylis glomerata*), Timothy Grass (*Phleum pratense*) and Yorkshire Fog (*Holcus lanatus*), which my farming uncle taught me. I never could find a satisfactory book for them. Bentham & Hooker (*Handbook of the British Flora*), to which I graduated when I was 18, was too obscure, and the pictures unhelpful. I only started a serious effort more than half a century later. Sedges fell under the same banner, but I tackled them a little earlier, and found them fascinating. Ferns I had learnt from quite an early stage, though here too, books were a problem, and I mostly had to rely on an elaborate old one, Druery's *British Ferns and their Varieties*, which was concerned to describe all the variants and mutations the Victorians loved to collect. But the number of distinct species was so limited, and most of them so abundant in the Antrim Glens that they quickly became part of what I knew well.

I should go back in time to record one of the most important influences on my progress. The school I went to in Dublin till I was 13 did not teach botany. (I think they taught 'Nature Study' but I despised it, thinking they only 'taught' what I already knew or wanted to discover for myself!) However, there was a holiday competition. Prizes were offered for collections of wild flowers, pressed, mounted, labelled with English and Latin names, locality, date and family. The flowers had to be from one of four families. I think that first year they were the Rosaceae, Cruciferae, Labiatae and perhaps the

Ranunculaceae. The next year there was a repeat, with different, rather harder families; I think they included Scrophulariaceae and certainly the Compositae. I still remember the problems with the thickness of the Scotch Thistle (*Cirsium vulgare*). (I still refuse to call it Spear Thistle – it is the Scotch Thistle!) These competitions were unusual – indeed, ‘competitions’ is the wrong word, for they were not competitive but qualifying; you got a prize if you sent in a satisfactory package of pressed and labelled specimens. I think I was told at the time that the prizes had been offered by the Professor of Botany at Trinity College, Dublin, but there was never (as far as I knew) any contact directly with him, nor any commentary or report on the work. The actual presentation of the prizes was handled by the school.

Though it was fun to get a prize, the really important thing was the legacy it left me of a knowledge of Latin names, and a fondness for them and for classification. I think the constant linking of the Latin names and the English ones was important, and the looking them up and checking them and writing them out tidily together on the mount, fixed them into my memory in a way that never wholly disappeared, though it often faded away for years when I wasn’t using them.

At the age of 17, I needed a new school subject to offer for university entrance, and chose botany. At that stage I was ready and glad to learn; I loved the microscope work, the study of cell division, life cycles of lower plants, etc. Of the things I had missed lower down the school, I enjoyed those that mostly involved drawing – floral diagrams, sketches of winter twigs of trees, germination of seeds on blotting paper in a jam pot, etc. Indeed, an acorn started then, was taken home, planted in the garden, and grew into a fine Oak tree still visible from the Malone Road, Belfast (unless the ‘developers’ have wrecked the site within the last year or two).

However, at university I did not need my extra subject, so I abandoned it (except for attaching myself to botanical field trips on which friends

were going!).

Thereafter, most of my botanizing has been done on holidays – some in the British Isles and some in Europe (notably Austria and Switzerland for the alpinists) and some further afield. I always tried to buy Floras of the countries I went to – but outside Europe this was difficult. Within Europe, my most complicated effort was identifying flowers in Norway from a Flora written in Swedish – not knowing either language! But Latin names and good coloured pictures served together with occasional interesting resemblances to English names, notably “ljung” to “ling” (heather, *Calluna vulgaris*).

Outside Europe, my most frustrating time was in Australia, where so many of the orders and families were completely different, and time was not long enough to sample them adequately!

For many years, my plant-hunting, and making lists of what I found in the British Isles and abroad, was done just for my own pleasure, and without any idea that it might be of use. (I didn't know about the B.S.B.I. until much later.)

The exception was about 1955, when I heard of the *Atlas of the British Flora* in preparation, and sent in a few lists of the kind then wanted. I particularly remember making one stop on an unfamiliar road in Co. Tyrone, en route from Belfast to Donegal to make a list. I don't think my contributions were many or valuable, but I was delighted to receive a complimentary copy of the published volume. This sat on my shelves until sometime after 1970, when we moved house to Ballycastle. After a visit to Breen Forest, a bit of old woodland, four or five miles (6-8 km) away, in Glenshesk, it occurred to me to see which of the two species of Oak were recorded for it in the *Atlas*. As I glanced at the pages, turning them over, I was surprised and rather shocked to see how many squares near us showed absences for Celandine (*Ranunculus ficaria*), Wood Anemone (*Anemone nemorosa*) and even Primrose (*Primula vulgaris*) – whereupon, I wrote

to Dr Perring, asking him if a new edition was contemplated, and if I could help. He then explained about the mis-match of the Irish and British grids and put me in touch with Mr Stan. Beesley and also Mr Paul Hackney of the Ulster Museum.

I was constantly making outings by car within say a 30 mile (50 km) radius of Ballycastle, and walking over easily accessible paths or open land. So I set myself the task of making as complete a record as I could for the eleven 10 km squares most easily reached from my base in Ballycastle. At first I just had to ignore nearly all the grasses and sedges though as the work began to extend over several years I gradually began to add some. There were other genera I had to ignore – e.g. *Atriplex* – and I did not try to sort out the critical ones. I soon found, however, that some groups that I thought I knew well, such as *Rosa*, were also ‘critical’! I sent in all my cards, with notes, and I hope they have been of use. I also took part in the 1987/8 survey for parts of the square D14 containing Ballycastle, which happened to have been selected for detailed study.

I might just add a few lines about my techniques of identification for this survey. Very many of the items on the lists I knew well and could tick off unchecked. If I had temporarily forgotten a plant, a quick look at Keble-Martin’s (*The Concise British Flora in Colour*) pictures generally settled it. But for serious queries I relied on Webb’s *An Irish Flora* and/or the most recent edition of Clapham, Tutin & Warburg’s *Excursion Flora of the British Isles* (rarely needing to turn to their ‘bigger’ book); for grasses and sedges I had the recent specialist books, but for both I still kept turning to the pictures in Keble-Martin as a supplement or sometimes as a starting point to know what to rule out when using the keys.

I rarely found much use for books relying on photographs. Generally, I was concerned with distinguishing between look-alikes, and photographs don’t do that.

While I was doing these surveys, I became aware of curious discontinuities in the distribution of some plants I regarded as common. For example, I could find no Foxglove (*Digitalis purpurea*) in the Ballintoy square D04, and very few in the Causeway square C94. Greater Stitchwort, *Stellaria holostea*, too, is absent from Ballycastle westwards, though it, like the Foxglove is abundant to the east, and also south. Unexpected absences from all the paths and hillsides round the north-east corner (squares D14, D24 and the northern part of D23, from the north of Glenshesk to the approaches to Cushendun) were the Wood Anemone (*Anemone nemorosa*) and the Raspberry (*Rubus idaeus*), both of which are very common along roadsides to the west. These, and some other oddities of distribution, cannot be attributed to recent changes of land use.

There were also some odd patches of roadside with an exceptionally rich flora. One was a laneway near the head-waters of the Bush River; another, a stretch of perhaps 50 m of the Coast Road approaching Torr Head, had four or five species of orchids; again, a lay-by near Ballintoy, surfaced with tarmac had Fragrant Orchid (*Gymnadenia conopsea*) coming up through it.

In contrast to this, I noticed how things I had thought common were disappearing. One sad loss is the yellow daisy, *Chrysanthemum segetum*, officially called Corn Marigold – but we always used the old local name, Gilgowans. These used to border every potato field with a carpet of yellow; now it is hard to find a single one. Poppies, too, have gone from everywhere – except an occasional Opium Poppy (*Papaver somniferum*) on the foreshore at Rathlin. Other arable weeds such as Fumitory (*Fumaria* spp.) and Corn Pansy (*Viola arvensis*) are now hard to find. So are some other things once thought to be common, e.g. Black Medick (*Medicago lupulina*) and Yellow Stonecrop (*Sedum acre*).

I might just finish by noting (what I think is clear from the above) how great an interest and pleasure field botany has been for all my

life. And if there is now an element of sadness for the things that have gone, there is nevertheless plenty left all around to explore and enjoy. And on days when I can't make excursions beyond the garden, there is still satisfaction in being able to identify the weeds as I pull them up!

GLOBE FLOWER AND BIRD CHERRY

R. Sheppard

Carnowen House, Raphoe, Lifford, Co. Donegal

Some years ago, I became struck by the biogeographical similarities between two otherwise very different plants, the Globe Flower, *Trollius europaeus* and the Bird Cherry, *Prunus padus*. Both have a northern or highland distribution in Great Britain, and are reasonably common north and west of lowland England. Both have a fairly tenuous foothold in Ireland, and the old records (there are very few recent ones) in the 1976 edition of the *Atlas of the British Flora* suggested that the stronghold for both should be Co. Donegal, where I had just come to live. On top of that, the only published site that I know for either plant was one which they had in common, namely the shores of Lough Gartan, in Co. Donegal.

I went to see, and found that Bird Cherry grew in some abundance in an area of old woodland away from the shore, but not on the shore itself. The Globe Flower I couldn't find at all! So I broadened the search. It would have been quicker if I had bothered to first look up Hart's 1898 Flora of the county (*The Flora of Donegal*), but much less fun. I might not have had the pleasure of noting a Globe Flower plant growing with garden flowers by a farmhouse gate, and finding out from the farmer that it had been dug up years earlier from the

nearby river – where I found it still growing. Hart also knew the site!

Eventually, I established that the distributions of both plants in Co. Donegal are remarkably similar. Both have their core area along the wooded middle reaches of the larger east-flowing rivers: Bird Cherry along the Finn, Deele, Swilly and Leannan; Globe Flower along the Finn, Deele and Leannan. This may seem odd to those of you who know that in Great Britain, one species is an inhabitant of hill woods, the other of wet meadows, especially those of the sub-alpine zone. But although the two species are found here in the same locations, this may prove to be only a quirk of history, rather than a more fundamental association.

Bird Cherry grows in old woodland, and where this is just a linear strip of Alders, it is quite content to take its place, overhanging the water. But it is equally happy fighting for its share of the light in an Oak/Hazel/Birch wood, or even as a hedgerow tree up to several hundred metres away from the river. There are scattered trees elsewhere in the county, some obviously planted, or the descendants of planted trees, but some which grow across the central watershed of the county along west and south-flowing streams. These trees hint at a former core distribution which might have been much wider when riverine woodland was itself less confined than it is today. Within its restricted range, and given the existence of riverine woodland, Bird Cherry is common and secure.

The Globe Flower, on the other hand, is perilously close to extinction. There is one site where it is a dominant species and present in very large numbers. But even here it is vulnerable to possible habitat changes. Elsewhere it seems to be already on the slippery slope, growing only along the river banks, where winter floods frequently wash plants away. But more curiously, only isolated plants grow on the main banks. Luxuriant growth is strictly confined to rocky islets, usually of a few square metres only, and usually where the islet is cut off from the main bank by a metre of water in the

winter, and by a puddle or some bare rock in the summer. A collapsed bank is even an advantage. So it seems that protection from some shore-bound herbivore is essential to the species' survival. Yet along these thickly wooded rocky streams, most sites where the Globe Flower grows are not grazed by sheep or cattle, and one is left speculating about what wild animal is so timid of water as to be unable to cross a gap that most humans can jump with ease. The answer to that puzzle could help secure the Globe Flower's future. It would be even better if someone could tell the Donegal Globe Flowers about wet meadows.

THE IRISH RECORDERS' MEETING, 1990

Sylvia Reynolds

The Irish Recorders' Meeting held at Lavistown Study Centre on 8th-9th September was a great success. It was attended by 23 botanists and included 17 recorders representing 23 vice-counties. The residential aspect of the meeting allowed people time to talk and get to know each other over meals (pansies were used to decorate the beetroot!), while washing-up, and between papers. Discussions of a more frivolous nature took place at The Pike. Do botanists have hidden talents? With which of the botanists who were present would one associate *Plantago major*?

The highlight of the second day was to walk under trees by the River Nore and suddenly come to the edge of a large field with thousands of plants of *Colchicum autumnale* stretching into the distance as a pale haze. After such a weekend one cannot help but feel that field botany in Ireland is thriving and that B.S.B.I. members are ready to take up at least some of the challenges thrown out to them during papers given on the first day.

THE SPREAD OF ALIEN PLANTS ON IRISH ROADSIDES

Summary of the talk given at the Irish Recorders' Meeting, 1990

Sylvia Reynolds

115 Weirview Drive, Stillorgan, Co. Dublin

An array of alien plants unfamiliar to most botanists present was on show, some of which have been found in their thousands in Ireland over the last three years. They lived up to their common names of Pigweed, Fat Hen, Treacle Mustard and Stinkweed after having been kept in a plastic bag for a week!

In 1988 many exotic plants appeared at Foynes Port in Co. Limerick. As well as having a wide native distribution, these plants tend to be widely naturalised and their seeds were almost certainly introduced with animal feed imported into Ireland from many parts of the world. Alien plants were also found at Dublin Port in smaller numbers and by Daniel Kelly at Rosbercon in Co. Kilkenny, but were not obvious on roadsides that year.

In 1989, *Amaranthus retroflexus*, *Setaria viridis*, *Thlaspi arvense* and a distinctive form (f. *glomerulosum*) of *Chenopodium album* occurred in large numbers on roadsides particularly in Co. Limerick on roads leading away from Foynes and in the New Ross/Rosbercon area. This assemblage of plants was often accompanied by smaller numbers of *Erysimum cheiranthoides*, *Descurainia sophia*, *Erucastrum gallicum* and *Kochia scoparia*. During the summer many roads were driven and other ports searched. *A. retroflexus* was found in twelve of the 40 Irish vice-counties and at the port in Arklow.

The same species were again noted at most of the roadside sites revisited in 1990. It became clear that their presence was due, in some part, to plants overwintering, e.g. *Thlaspi arvense* and *Erucastrum gallicum*, and self-seeding. Thousands of seedlings of *Amaranthus retroflexus* were found where mature plants were seen the year before. Seeds of several alien species had been sown in a garden in 1989, had produced seed prolifically that year and a second generation appeared in 1990.

So far the alien plants noticed in large numbers over the last couple of years have been confined to ports and roadsides, and it was decided not to encourage new records for Co. Kilkenny by dumping the exhibited plants on Roger Goodwillie's compost pile in Lavistown!

IRISH FIELD MEETINGS, 1991

Eight weekends of field meetings have been planned for 1991; details of the meetings will be given in the *B.S.B.I. Yearbook*. Please note that there will not be a separate mailing with these details to Irish members as in previous years. Further information, if required, may be obtained from Sylvia Reynolds (Field Secretary), 115 Weirview Drive, Stillorgan, Co. Dublin, telephone 01-2887856 (from April, 1991 onwards).

A BOUQUET FOR IRELAND

Congratulations are due to Mary O'Gara, Justyne Flowers, Blackrock, Co. Dublin who won Interflora's 'Florist of the Year' title in a competition at the English Riviera Centre, Torquay, Devon.

LETTER

Knockavota
Milltown
Co. Kerry

10th May, 1990

Dear Editor,

One of the most meaningful and practical contributions B.S.B.I. members could make towards wildflower conservation is to identify scarce or endangered species in their own locality or region and take whatever steps may be necessary to protect them.

Only by putting the emphasis on local conservation can we guarantee success at National level. The fact that such plants may be plentiful in other areas is no excuse to preside over their demise on our own doorstep!

Yours, etc.,

Michael O'Sullivan

VICE-COUNTY RECORDERS, 1990

H1 *S. Kerry* – Mrs E.C. Mhic Daeid, Avondale, Moynalty, Kells, Co. Meath.

H2 *N. Kerry* – Dr P.S. Wyse Jackson, Botanic Gardens Conservation Secretariat, I.U.N.C. Conservation Monitoring Centre, 53 The Green, Kew, Richmond, Surrey, TW9 3AA and Mr M.B. Wyse Jackson, 26 Upper Mt Pleasant Av., Ranelagh, Dublin 6 (joint).

H3 *W. Cork* – Miss M.J.P. Scannell, 43 Raglan Rd, Ballsbridge,

Dublin 4 and Mr T. O'Mahony, 6 Glenthorn Way, Dublin Hill, Cork City (joint).

H4 *Mid Cork* – as above.

H5 *E. Cork* – as above.

H6 *Co. Waterford* – Dr I.K. Ferguson, The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AE.

H7 *S. Tipperary* – R. FitzGerald, 55 Tolka Rd, off Clonliffe Rd, Dublin 3 and Miss E. Ni Lamhna, 6 Ashdale Gardens, Terenure, Dublin 6 (joint).

H8 *Co. Limerick* – Mrs S. Reynolds, 115 Weirview Drive, Stillorgan, Co. Dublin.

H9 *Co. Clare* – C. Brady, 66 Templeville Drive, Templeogue, Dublin 6.

H10 *N. Tipperary* – Dr D.W. Nash, 35 Nutley Park, Dublin 4.

H11 *Co. Kilkenny* – R.N. Goodwillie, Lavistown Study Centre, Lavistown, Co. Kilkenny.

H12 *Co. Wexford* – R. FitzGerald, Beggar's Roost, Lilstock, nr Bridgewater, Somerset, TA5 1SU and Dr J.R. Akeroyd, Foxglove Cottage, 24 The Street, Hindolveston, nr Dereham, Norfolk, NR20 5BU (joint).

H13 *Co. Carlow* – Miss E.M. Nic Lughadha, The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AE and N. Tirard, Coolnabrune, Borris, Co. Kilkenny (joint).

H14 *Laois* – Dr P.J. Foss, 5 Royal Marine Terrace, Bray, Co. Wicklow.

H15 *S.E. Galway* – Dr M.S. Sheehy-Skeffington, Dept of Botany, University College, Galway.

H16 *W. Galway* – Mr C. Breen, 101 Bettyglen, Raheny, Dublin 5.

H17 *N.E. Galway* – Dr C.M. Roden, Red Bank Fisheries, New Quay, Ballyvaughan, Co. Clare.

H18 *Offaly* – Dr J.G.D. Lamb, Woodfield, Clara, Offaly.

H19 *Co. Kildare* – Mr D.A. Doogue, 12 Glasilawn Rd, Dublin 11.

H20 *Co. Wicklow* – Dr T.G.F. Curtis, St Michael's, Meath Rd, Bray, Co. Wicklow.

H21 *Co. Dublin* – Mr H.J. Hudson, The Bungalow, Hampstead,

Whitehall, Dublin 9.

H22 *Meath* – Miss M. Norton, Tinode, Manor Kilbride, Co. Wicklow.

H23 *Westmeath* – Mr C. Breen, 101 Bettyglen, Raheny, Dublin 5.

H24 *Co. Longford* – S. Howard, Carra, Granard, Co. Longford.

H25 *Co. Roscommon* – Mr J.J. Early, Cork Co. Council Offices, Skibereen, Co. Cork.

H26 *E. Mayo* – Mr G. Sharkey, 2 Spencer St, Castlebar, Co. Mayo.

H27 *W. Mayo* – as above.

H28 *Co. Sligo* – Dr J.A.N. Parnell, School of Botany, Trinity College, Dublin 2.

H29 *Co. Leitrim* – Dr D.L. Kelly, School of Botany, Trinity College, Dublin 2.

H30 *Co. Cavan* – Mr P. Reilly, 26 Nephin Rd, Dublin 7.

H31 *Co. Louth* – Mr D. Synnott, National Botanic Gardens, Glasnevin, Dublin 9.

H32 *Co. Monaghan* – as above.

H33 *Fermanagh* – Dr R.S. Forbes, Department of Extra Mural Studies, Queen's University, Belfast, BT7 INN.

H34 *E. Donegal* – Miss P. Hodson, 60 Forest Av., Kingswood Heights, Dublin 24.

H35 *W. Donegal* – Dr T.G.F. Curtis, St Michael's, Meath Rd, Bray, Co. Wicklow.

H36 *Tyrone* – Miss D.S. Lambert, The Lookout, 49 Main St, Castlerock, Co. Derry.

H37 *Co. Armagh* – Miss N. Dawson, 14A Dobbin's Grove, Armagh.

H38 *Co. Down* – Mr P. Hackney, The Gobbins, 146 Gobbins Rd, Islandmagee, Co. Antrim, BT40 3TX.

H39 *Co. Antrim* – Mr S. Beesley, 12 Downview Park, Greenisland Carrickfergus, Co. Antrim, BT38 8RY.

H40 *Co. Londonderry* – Miss D.S. Lambert, The Lookout, 49 Main St, Castlerock, Co. Derry.

(If there are corrections to the above list, could you please inform the editor?)