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## Contents

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E.C. NELSON, D. LIDSTONE, A. HATHWAY, D. McNALLY and J.M.B. SMITH	Nickars! Or, The Art Of Growing Long-Distance Flotsam .....	2
E.W.M. MAGOR	Moiria Reid Of Moyclare .....	14
M. REID	Moyclare - Or Cramming Them In At Liskeard .....	15
M. REID	Gleanings From Cornwall - Some Letters From Moyclare to Glasnevin .....	17
J.G.D. LAMB	Daphnes In An Irish Context .....	21
D. McNALLY	Murray Hornibrook (fl. 1905-1942): The Father Of Dwarf Conifers .....	23
M. FORREST	An Eighteenth Century View Of Stradbally Hall And Its Environs .....	30
E.M. McCracken and E.C. NELSON	Julius Wilhelm Keit, A German Horticulturist At The Botanic Gardens, Glasnevin .....	34
E.C. NELSON	Notes On Irish Cultivars With Some New Names .....	41
OBITUARY	Eileen May McCracken (1920-1988) .....	50
BOOK REVIEWS	.....	51

Front Cover - Flotsam growing in Cornwall - sketches by Alma Hathway - on the left and right is horse-eye bean (*Mucuna sloanei*); nickar nut (*Caesalpinia bonduc*) in the lower right.

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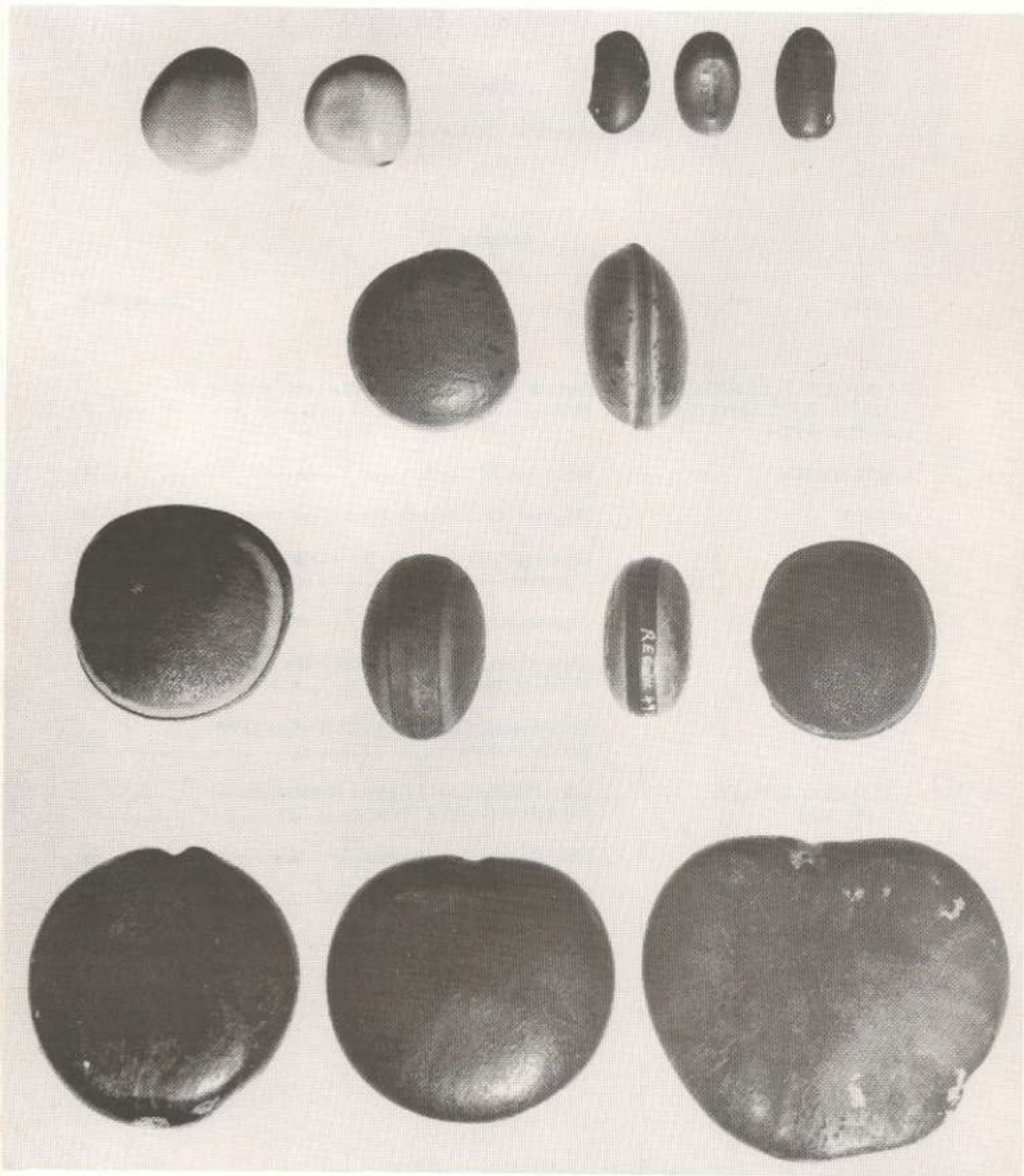


Figure 1. Nickar nuts and drift seeds from Irish coasts.  
 Top row - sea beans (*Entada gigas*)  
 Second row - horse-eye beans (*Mucuna sloanei*)  
 Third row - sea-purse (*Dioclea reflexa*)  
 Bottom row - coral-bean (*Erythrina* sp.), 3 specimens; nickar nut (*Caesalpinia bonduc*), 2 specimens.



NICKARS!  
OR, THE ART OF GROWING LONG-DISTANCE FLOTSAM

An introduction to growing nickars - E. Charles Nelson

Lest any should take offence, I quote the *Oxford English Dictionary*: Nicker ... Also -ar. 1696. [perh. native name.] The hard seed of the bonduc tree ...

Nickars have been known in this part of the world for more than three centuries, along with 'cocoons', 'Molucco beans' and 'horse-eye beans'. The first person to make reference to these names was Hans Sloane, a native of County Down and erstwhile founder of the British Museum, in a contribution published in the *Philosophical Transactions of the Royal Society of London*. Sloane's report, the *Oxford English Dictionary*'s source, was entitled 'An Account of Four sorts of Strange Beans, frequently cast on Shoar on the Orkney Isles, with some Conjectures about the way of their being brought thither from Jamaica, where Three sorts of them grow.' Since Sloane's article was published in 1696, many other strange seeds (Figure 1) have been collected on Irish and other European beaches (Nelson 1978, 1983, 1989).

The seeds recorded by Sloane and his successors are of tropical nativity; most are endowed with hard, impermeable seed coats, and they are capable of floating in ocean waters for many years. They drift in the Atlantic currents, and are thus carried far from their native habitats, ending up as flotsam cast ashore on our western beaches. Similar seeds (and fruits) are produced in other regions, and float on currents in other oceans (Gunn and Dennis 1976).

In the small collection of essays, two Cornish amateur naturalists relate their experiences of collecting the seeds, germinating them and cultivating the resulting plants. Similar tales might have been told by Irish beachcombers. Dr Jeremy Smith tells of his work with the seeds and fruits of Pacific Island beaches, and to commence, I have edited some early accounts of growing seeds from Irish and British sources. Denis McNally gives an account of the techniques employed at Glasnevin to grow plants from drift-seeds.

I

Glasnevin, nickars and other early tales - E. Charles Nelson

Dr Hans Sloane (1696) wrote that he '... had several times heard of strange Beans was [sic] thrown up by the seas on the Islands, on the North-west parts of Scotland ... they are thrown up pretty frequently in great Numbers and are no otherwise regarded then as they serve to make Snuff-Boxes ...' He recorded these four species - *Entada gigas* (known to him as 'cocoons', and now generally called sea-beans or sea-hearts), *Mucuna sloanei* (named for him by Fawcett and Rendle, and known as horse-eye beans), *Caesalpinia bonduc* (nickar or bonduc), and *Merremia discoidesperma* (Mary's bean). Sloane suggested that the seeds floated on ocean currents from Jamaica where he had seen and collected the first three from the parent plants.

More than a century later, in 1800, General Charles Vallancey was given similar seeds by a lady. In a letter to Sir Joseph Banks dated 23 April 1802 (quoted in Nelson 1983), Vallancey related the story:

'... You may have read in Smith's history of Kerry,\* that foreign seeds are usually cast on that Coast. Martyn [1703] says the same of the Orkneys. A Kerry lady gave me some seeds two years ago, that she had picked up on that shore; they were of a grey blue colour, except one that was yellow: they were about the size of marbles, and globular, highly varnished, and the kernels or seeds rattled within. Of these grey, I gave a gentleman some, & sowed some in our hothouse; they prove to be runners, our Gardiner thinks from Africa. My runners finished this winter by snow getting through a broken glass; but the yellow seed proved to be a shrub, unknown to all our Irish botanists: it is in full vigour, and about twice the size of the drawing enclosed. This sketch I made about a month since, and I find the sharp thorns have now dropped off, about halfway up from the earth of the pot, the stem is of a light brown: the leaves, some pointed, some rounded, which shows they are not come to full size or shape: - probably you will know this shrub and give me a name for it ...' [Ms. D.T.C. 13, 73-75; British Museum (Natural History), London].

\*There is no reference to tropical drift-seeds in Smith's *History of Kerry* (1756).



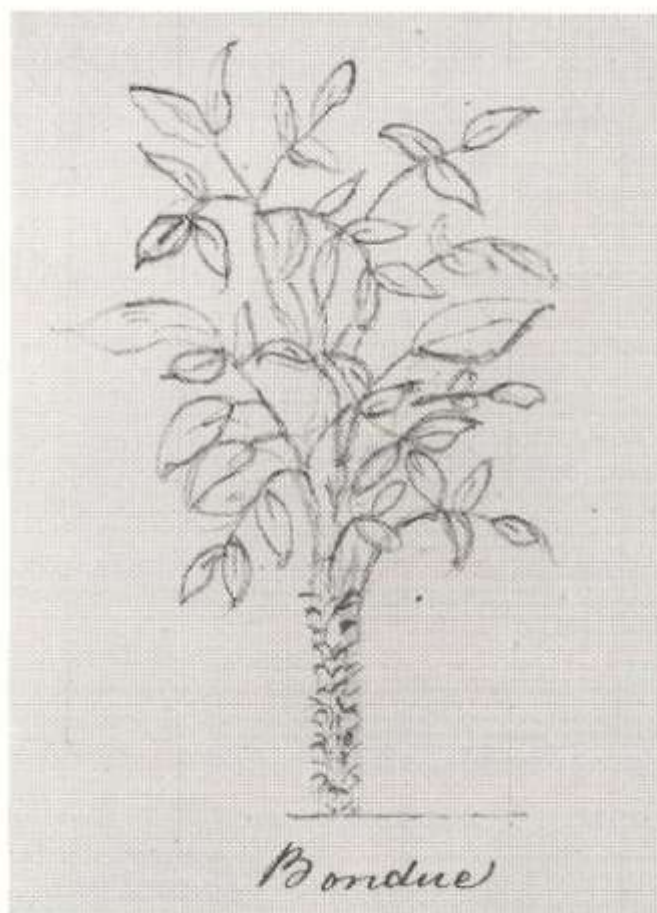


Figure 2. Vallancey's sketch of the bonduc plant grown at Glasnevin.

A rather inaccurate drawing (Fig. 2) is scribbled on the bottom of the final page of the letter. From the descriptions quoted, the seeds Vallancey received from Kerry were possibly two different nickars, *Caesalpinia bonduc* ('grey blue ... the size of marbles') and *C. major* ('yellow ... the size of marbles'), however I am inclined now to the view that only one species (*C. bonduc*) was represented and that the colour of the seeds has no taxonomic significance.

In a later letter, dated 10 November 1802, Vallancey wrote:

'The Bonduca, from the seed found on the coast of Kerry, is in a very flourishing state, beginning to grow bushy; the seed of Bonducella (we think) was picked up last week on the coast of Londonderry; it is planted & I hope will succeed ...' [Ms. D.T.C. 13: 292-297; British Museum (Natural History), London].

As a Vice-President of the Dublin Society, General Vallancey took an interest in the Society's newly-established botanic garden at Glasnevin, near Dublin. It is obvious from an appendix to the first catalogue of the Glasnevin Botanic Gardens published by Professor Walter Wade in 1802, that Vallancey's references to 'our hothouse' and 'our Gardiner' mean the glasshouses in the Glasnevin Botanic Gardens and the head gardener, John Underwood. The appendix, written by Underwood, included the note that 'Our Bonduc was raised from seed picked up on the coast of Ireland, and sent to the garden by GENERAL VALLANCEY, 1801'. The plant was listed as '*Melastoma Bonduc* Yellow-seeded *Melastoma*'.

Thus, about 1802, staff at the Glasnevin Botanic Gardens succeeded in germinating and cultivating, for a short time at least, *Caesalpinia bonduc*, an achievement which was not repeated, as far as is known, for many decades - indeed not until the 1970s. *C. bonduc* is again growing in Glasnevin - as explained by Denis McNally (Section IV).

There are few other published accounts of the cultivation of drift-seed plants - most seeds were kept as curiosities in museums or as talismans and lucky charms (see Nelson 1981). A few *Entada* seeds may have been converted for use as snuff-boxes or lucifer cases.

On 8 September 1877, a short editorial article appeared in *The Gardeners' Chronicle*, in which reference is made to work by Charles Darwin, and to a remark made by Robert Brown in which General Vallancey's drawing is mentioned. The article is reprinted here:



A CORRESPONDENT has lately forwarded us a most interesting WAIF FROM OVER THE SEA, in the shape of a young plant of CAESALPINIA or *Guilandina Bonduc*, raised from a seed washed on shore in August, 1876, in Festrol Bay, on the north coast of Cornwall. It was sown in April of the present year, and has germinated well. The two species of *Guilandina* are trailing leguminous plants, found in early every tropical country, particularly on the sea shore, their extensive distribution being caused by the transport of the seeds (which have an exceedingly hard impervious shell), from one country to another by means of oceanic currents. In the present instance the seeds must have crossed the Atlantic probably from the West Indies. How long they were on the journey, who shall tell? The average rate of Atlantic currents is given at 33 miles a day, some running at the rate of 60 miles. In any case, the seeds must, in all probability, have been a considerable time on the journey, and afford an instance of resistance to the injurious action of seawater. In MR. DARWIN'S experiments,\* out of eighty-seven kinds of seeds sixty-four germinated after an immersion of twenty-eight days in salt water, and a few survived after an immersion of 137 days. Ripe Hazel-nuts sank immediately, but when dried they floated for ninety days, and afterwards germinated. MR. DARWIN concludes, from his own experiments and those of M. MARTENS, that the seeds of about 10 per cent. of the plants of a flora could, after having been dried, be floated across a space of sea 900 miles in width and then germinate.

Referring to this very plant (*Guilandina* [i.e. *Caesalpinia bonduc*]), amongst others, ROBERT BROWN remarks "that the two conditions of development and protection of the embryo co-exist in so remarkable a degree that I have no doubt the seeds of those plants would retain their vitality for a great length of time, either in the currents of the ocean or in the digestive organs of birds." The eminent botanist adds in a note that - 'Sir JOSEPH BANKS informs us that he received some years ago the drawing of a plant, which his correspondent assured him was raised from a seed found on the west coast of Ireland; and that the plant was indisputably *Guilandina Bonduc*: Linnaeus also seems to have been acquainted with other instances of germination having taken place in seeds thrown on shore on the coast of Norway. Other instances of like nature are cited by Sir HANS SLOANE. These cases afford interesting proofs of the manner in which plants migrate and under favourable circumstances occupy new territory, though it is clear that the climatal conditions of North Cornwall are not such as would be suitable to the requirements of such a plant as *Guilandina Bonduc*. Let us hope the Colorado beetle will find these shores equally inhospitable. In any case our thanks are due to the correspondent who sowed the seed in question, and has thus afforded evidence that such seeds, wafted from a tropical country, may yet retain their vitality - a point which has been questioned.

## II

### Growing Drifters on a Shoestring of Knowledge - Des Lidstone

Cornwall - and a strange-looking bean on a local beach: it must be tropical!

On that flimsy assumption, *Mucuna sloanei* was pressed willy-nilly into a 3 inch earthenware pot of John Innes seed compost, tied in a clear polythene bag, and deposited beside a brass Cornish pixie on the living-room mantelpiece. It was warm up there, above the fire. Germination took place within ten days and the rate of growth was phenomenal - two to three inches daily. It could be seen growing!

Transferred to the greenhouse (8' x 6') and potted on, the vine soon reached the ridge and ran rampantly along a nylon cord stretched the length of the house. Ultimately it grew twenty-five feet, showing a marked reluctance to reverse direction when required to do so. The dark olive-green foliage was attractive and interesting, the leaves always turning edge-on to the direct rays of the sun. Sadly, the vine refused to flower, and after a valiant struggle to survive, took sick and died at the ripe old age of three years.

Having tasted success, I focussed my attention on a seed of *Entada gigas*, the true sea-bean - a giant brown 'Smartie' of a thing. Forsaking the mantelpiece treatment, a more conventional approach towards its germination was attempted, namely, a propagator in the greenhouse. Excitement was rife as the bean swelled to the size of a golf ball and a tentative green shoot appeared. Ominous things were happening beneath the surface; the tough casing proved too much for the young root and the whole thing putrefied very quickly.

\*Charles Darwin's experiments on the effects of sea-water on the germination of seeds were reported in *The Gardeners' Chronicle* in 1855.



Undeterred by the demise of *Entada*, I selected as the next victim a seed of *Caesalpinia bonduc*, the grey nickar nut; dove-grey with very fine concentric ring markings, it was a real toughie.

Given identical treatment to the defunct sea-bean, it suffered the added indignity of being attacked by a hacksaw. A groove was cut around the middle, almost through the very hard casing, to facilitate water absorption and, thereafter, germination. Whatever else, the shoot and the root should find their way out. This did the trick, and the plant was a great success. With its prickly stem and long, pinnate leaves lighter green than, but reminiscent of mountain ash foliage, the nickar nut lived outdoors in a container throughout the warm summer days and nights. Repeated cutting back to contain it within reasonable bounds subsequently caused its demise without, alas, producing a single flower in five to six years of life.

Seeds suspected of being, and eventually proving to be sea-peas, *Lathyrus japonicus* subsp. *maritimus*, germinated successfully, and the plants flowered and set seed. This caused a lot of excitement. Where did the seeds hail from? Good ol' US of A no less! Not quite as large as sweet pea seeds, they had crossed the Atlantic Ocean. What survivors!

They were treated as sweet pea seeds, but no attempt was made to 'nick' them; at that time they were too precious to risk damaging the embryo. The plants resembled the garden pea, with light green stems and leaves. The flowers, about half an inch across were of two shades of blue and quite numerous. A 'now-you-see-me, now-you-don't' sort of plant in the wild, many years elapsing between reports of its presence around the Cornish coast, it lives happily in a container in the garden.

Finally, two drifters which appear in large numbers on the Atlantic coast of Cornwall from time to time, are the tropical *Ipomoea alba* and the non-tropical *Calystegia soldanella*. Both germinated quite easily despite the hardness of their straw-coloured seed cases.

*Ipomoea alba*, or morning glory, did not respond to the care lavished upon it for some inexplicable reason. After reaching eighteen inches in height, and looking like a typical bindweed plant, it turned a sickly white and collapsed. Maybe it was too hot and dry under greenhouse conditions (packeted seed of morning glory produced healthy plants which flowered continuously from early summer to the end of September).

*Calystegia soldanella*, on the other hand, was a startling success. The sea bindweed lived up to its name and became something of an embarrassment. It would not stop growing - talk about Topsy! With its trumpet-shaped pink flowers, healthy green fleshy long-stemmed leaves, it still thrives in a container, just waiting to be let loose in the garden!

There will be other fascinating drifters and more successes and failures, but there will never be anything more exciting than the emergence of that first horse-eye bean, *Mucuna sloanei* - a piece of mantelpiece magic!

### III

#### Recollections of a Flotsam Grower - Alma Hathway

You don't need to be a milkman, a taxi-driver or a window-cleaner, to witness some extraordinary things - just visit Penhale Sands one fine day and go beachcombing. You'll get some very funny looks and have odd experiences when you're down on your knees in the sand, poking through smelly lumps of seaweed and multi-coloured transatlantic junk to find drift-seeds.

Overcome by curiosity, some people just have to ask what you're looking for, or, as on one day, what I had found. On that occasion, it happened to be a bright new fishing float - "just the thing for the boys", I thought, and put it in my pocket. Suddenly a shadow blocked out the sun. "Excuse me", said a naked man, "but what did you just pick up? It looked like something dangerous that could have been lost by the Ministry of Defence ..." I showed him the float to reassure him, expressed my appreciation at his concern and carried on searching for seeds; he trotted off to resume his sunbathing!

As regards the seeds, you explain to people who enquire what you're looking for and wait for one of several reactions which can range from giving you an even funnier look and walking on, to responding with interest. From the ensuing conversation they may emerge enlightened and enthusiastic about these incredible drifting beans and seeds.

It is several years since my young daughter found the first seed, small, round and grey, among the strandline debris on Penhale Sands. We were collecting driftwood and anything else that looked biologically or artistically interesting. As I send records of unusual specimens of any kind to Mrs Stella Turk, director of the Cornwall Biological Records Unit, I gave her the seed that Dagmar had found, which she duly sent to Dr Nelson for identification. With great interest - and a few giggles - we read his letter telling Dagmar that she had found a nickar nut, and how it had travelled all those miles from the Caribbean to be washed ashore at Penhale.





Figure 3. Flotsam growing in Cornwall - sketches by Alma Hathway - on the left and right is horse-eye bean (*Mucuna sloanei*); nickar nut (*Caesalpinia bonduc*) in the lower right.





Figure 4. More flotsam alive in Cornwall - sketches by Alma Hathway - *Ipomoea* sp. (morning glory) above; and (below) another unidentified plant grown from seeds tentatively assigned to *Ipomoea*.

Since then, when good conditions and time coincide, we make a special point of looking for tropical seeds, as well as other forms of stranded life, from hydroids to cetaceans. As time and our experience progressed, our beachcombing forays have become much more scientific strandline surveys. Among the seeds we have collected over the years are sea heart (*Entada gigas*), sea purse (*Dioclea reflexa*), nickar nut (*Caesalpinia bonduc*), three varieties of horse-eye bean (*Mucuna* spp), *Canavalia*, *Erythrina* (found by my eldest son Renfred, who prefers to go bird-watching - but the bean-bug even hit him!), the smaller seeds of morning glory (*Ipomoea*), sea bindweed (*Calystegia*) and the sea pea (*Lathyrus japonicus*), the latter after Dr Nelson suggested I get down on my hands and knees in order to find them, which I did eventually, but only after lying on my stomach for hours, poking through millions of tiny plastic pellets (where do they come from?), all shades of brown, and sea-pea size.

Our best finds so far are two seeds (endocarps!) of the star-nut palm (*Astrocaryum*). Bruce found a marvellous specimen about one inch and a half long in 1986, the first recorded from the British coast since 1910. I was green with envy as he always seems to find the biggest and the best! From then on, I pounced on every sea-worn lump of coke, every odd-shaped little black pebble, only to be disappointed - until one evening, we went for a last walk on the shore before I had to go into hospital for a minor operation. I was feeling rather nervous and somewhat fatalistic when, just a few yards along the tideline, I found it - my own *Astrocaryum*! My worries were forgotten in my delight. It was only a third of the size of Bruce's specimen, but at least I had discovered one, and for all my fears, recovered rapidly to write this contribution.

We have since tried to germinate some of the seeds, as we were curious about the plants of origin. Totally inexperienced when it came to specialised horticulture, our methods were purely experimental.

We dropped the freshest nickar nut into a jar of water, placing it on the mantelpiece above the Rayburn in the kitchen. After floating for a day or so, it began to release a snowstorm of white scales as its outer casing disintegrated as the water was absorbed. Eventually, a brown, velvety nut was revealed which sank to the bottom on the jar and started to germinate. It was then planted in 'Growbag' compost and a plant grew with leaves similar to those of an ash. It is now over four feet high. Two *Mucuna* were similarly treated; they sank, germinated fairly quickly and were also planted in 'Growbag' compost. Both continue to thrive. *Dioclea* floated for some time but did not germinate until the surface was scratched to allow penetration of fresh water. However, it was a rather weak plant compared with *Mucuna*, the leaves and stem pale yellow-green and covered with fine reddish hairs. It also grew more slowly than *Mucuna* which we actually watched growing! One night, Bruce noticed one of the plants move fractionally. When he looked again, the stem had changed direction. We decided to keep watching and sure enough, every so often, the plant made a visible movement - to the side, then forward, and then around, until eventually another turn had been made around the supporting stick. Between 8 and 11 pm, the plant made two turns around its support. Perhaps the magic beans that Jack of Beanstalk fame swapped for his mother's cow were also *Mucuna*! Our's were certainly rampant and climbed past the end of their sticks up into the vine in our conservatory and took over the place; had there been no glass roof, they may well have climbed up the chimney and beyond. Sadly, Dr Nelson wouldn't have needed his machete in order to get to us, as the dreaded mealy bug insidiously invaded our conservatory and wreaked its sneaky havoc with everything. The infestation was so uncontrollable, we just had to prune everything down. I hoped the horse-eye bean plants would regenerate from their roots, but they just rotted away, unlike my runner beans which come up year after year.

We had no success at all with *Entada*, despite using the same methods as with the other seeds. They swelled, but deteriorated after planting. *Calystegia*, *Ipomoea* and *Lathyrus* all grew but didn't flower. It was interesting to meet the Lidstone family and exchange horticultural experiences - at least their sea peas flowered, unlike mine which I think were planted too late in the year.

We now need to find some more seeds to try again, especially seeds of *Entada*, so (apologies to William Shakespeare) 'Once more unto the beach, dear friends ...'!

#### IV

#### The Scientific Approach to Growing Drift Seeds - Denis G. McNally

Various species of drift seed were received on 10 June 1988 from Dr Charles Nelson, with a request for them to be sown and germinated. The seeds were of different sizes and colours but each had a very hard seed coat.

I took the seeds to the workshop attached to the Gardens. There, using the grinding stone at very low speed, I made slight incisions on each seed; this was to enable water to penetrate the testa (seed coat) and thus permit germination. Care was taken not to cut into the hilum of any seed.



The seeds were returned to the propagation house and placed in jars of lukewarm water and allowed to soak for forty-eight hours. Having been warned by Dr Nelson of the tendency of drift-seeds to rot due to fungal attack, I attempted to overcome this problem by using two parts Silvaperl (an inert sterile volcanic rock) to one part John Innes seed compost. The seeds were individually planted into 3.5 in. pots, covered with Silvaperl and topped off with seed compost. The seeds were watered-in with a fungicide (Captan at 1 oz per gallon of water). Finally, the pots were covered with glass and shaded. They were placed in an average temperature of 80°F (27°C).

First signs of germination appeared approximately ten days later. The resulting germination was very good; only the two *Entada gigas* seeds failed to germinate and finally rotted away.

After germination, the seedlings were grown on in an average temperature of 80°F. The seedlings were potted into John Innes potting compost No. 2, plus additional peat and Silvaperl. They were allowed to grow unchecked. Potting on into larger pots took place when necessary. Bamboo canes were used to construct a trellis for those plants which required support for climbing.

At the time of writing (21 October 1988), nineteen weeks after the initial sowing of the drift seeds, the resulting plants continue to grow strongly. They have been tentatively named. I recorded their current growth as follows:

<i>Dioclea reflexa</i>	2 plants, 5 ft tall, a climber.
<i>Mucuna sloanei</i>	4 plants, 6 ft tall, plants still growing vigorously, also a climber.
<i>Caesalpinia bonduc</i>	2 plants, one 12 in., one 10 in., no lateral growth produced as yet.

## V

### Nicking Nickars: Some Antipodean Experiences - J.M.B. Smith

The Great Barrier Reef runs like a turquoise necklace along the north-east coast of Australia. In its northern reaches it approaches quite close to the continent, but at its south-eastern extremity, nudging against the Tropic of Capricorn, the Swain Reefs lie some 190 km offshore. Like all living coral reefs, the Swains are submerged except at the lowest tides. Individual reefs, of which there are scores, are separated by channels of deep, dark blue sea.

On a few of the Swain Reefs waves have swept together heaps of coral sand or rubble to form small islands called cays. They are only a few hundred metres around, and have (at most) a sparse, grassy vegetation, home to thousands of breeding seabirds and regularly dug over by nesting turtles. Only a handful of plant species grows there, yet a far larger number is represented by drift-seeds on the beaches (Smith *et al.*, in press). A few of these seeds will germinate after burial by wind-blown or turtle-dug sand and following a rainstorm, but seedlings never survive for long. If not trampled by birds, they die of drought in the unshaded, free-draining soil beneath the merciless sun, or are destroyed by wave wash-over or erosion during a storm or 'king' tide.

Consideration of current and wind patterns in the southwest Pacific suggests that most drift-seeds reaching the Swains come from the islands in the New Caledonia-Vanuatu-Fiji area to the north-east, rather than from the closer Australian coast to the west. Indeed a couple of the species represented are not known from Australia (except as drift-seeds), though most are widespread inhabitants of tropical shores throughout the Indo-Pacific region. Drift-seeds would have taken from three to six months to cover the 1,200 to 2,500 kilometres distance, and they usually arrive in a weathered and encrusted condition. Nevertheless, at least a few seeds of nearly half of the forty or so species recorded are viable when found on the cays.

I was successful during 1986 and 1987 in germinating drift-seeds of eleven species, gathered during expeditions to Swain Reefs. Some other species were recorded only as seedlings on beaches; their ungerminated seeds were never found because of their small size. In another case - the coconut - the fruits are too large to be conveniently collected, though the odd nut germinates on a cay.

My germination experiments were conducted during summer at Armidale (on the northern tablelands of New South Wales), in a ventilated glasshouse. Outside temperatures generally ranged from 5°-15°C at night to 20°-30°C by day. Conditions in the glasshouse were hotter than this, especially on sunny days, and heavy daily watering was often needed. Seeds were sown into trays containing a 1:1 mixture of crumbled peat and 'crusher dust' (sharp sand). It became apparent that germination of some hard seeds would seldom occur, even after many weeks, without the testa first being nicked with a hacksaw: such seeds were *Hernandia* and the legumes *Entada*, *Erythrina*, *Mucuna* and *Strongylodon*.



The exercise was terminated as frosty winter set in. Selected seedlings were dispatched to warmer Brisbane, where it is hoped they can be grown on towards maturity - and in some cases, identification. Several others became pressed herbarium specimens. I continued to water a few plants, but while they were not frosted, the cool environment of the unheated glasshouse took its toll: some plants of *Entada phaseoloides* survived in poor condition, but all those of *Caesalpinia bonduc*, *Calophyllum inophyllum*, *Hernandia nymphaeifolia*, *Mucuna gigantea* and *Mucuna* sp. 1 succumbed.

An aim in germinating the seeds was to clarify their identity, but in one case germination introduced a new puzzle. Seeds of *Entada* ('sea-hearts', though in fact rather variable in shape) grew into two distinct types of seedlings, though the seeds were indistinguishable! Type A, the commoner, was a tendrilled climber, and probably this is the widespread *E. phaseoloides* of the eastern tropics. Type B, however, grew erect, lacked tendrils, raised its cotyledons above the soil, and bore leaves with a different arrangement of leaflets (paripinnate rather than reduced bipinnate): its identity remains obscure. Type B seedlings grew from seeds planted without being nicked, while most Type A seedlings only developed after such scarification.

Numbers of seeds that germinated, and numbers of the same sorts that were sown, are shown in the table below:

Species	Seeds sown	Seeds germinating
<i>Caesalpinia bonduc</i>	1	1
<i>Calophyllum inophyllum</i>	210	1
<i>Entada</i>	75	
Type A		45
Type B		2
<i>Erythrina variegata</i>	2	2
<i>Hernandia nymphaeifolia</i>	11	8
<i>Ipomoea pes-caprae</i>	1	1
<i>Mucuna gigantea</i>	33	21
<i>Mucuna</i> sp. 1	7	5
<i>Mucuna</i> sp. 6	1	1
<i>Strongylodon lucidus</i>	3	1

All belong to tropical species, mostly widespread in the Indo-Pacific region or even further afield. *Caesalpinia bonduc*, the pantropical nickar, is an abominably spiny, sprawling shrub, commonly found on bouldery headlands and beaches. *Calophyllum inophyllum* is a beach tree which provides excellent shade for the overheated beachcomber. *Entada phaseoloides* is an ecologically widespread woody liane, a nuisance to farmers but also common in the less saline parts of mangrove swamps.

Seeds of several *Erythrina* species cannot be distinguished, but those reaching Swain Reefs cays probably belong to *E. variegata*, the coral tree that overhangs many a Pacific island shore and whose red blossom is the delight of lorikeets and other nectar-feeding birds. *Hernandia nymphaeifolia* is another beach tree, whose seeds before dispersal are contained within a black papery fruit, in turn lying inside an attractive, urn-shaped, fleshy pink calyx.

*Ipomoea pes-caprae* is a creeping plant of sandy shores in all the warmer regions of the world, known as beach convolvulus or, in America, railroad vine. *Mucuna gigantea* is a woody liane common in beach forest: its seeds are round, flat beans that can vary in colour from pale pinkish-brown through chestnut to glossy black, with various amounts of black speckling. *Strongylodon lucidus* (and probably both the unnamed species of *Mucuna* too) is a woody liane of rainforests, including beside rivers.

Drift-seeds of several other species could not be germinated, and appear always to be dead on arrival at Swain Reefs. Some, like the candlenut *Aleurites moluccana*, are evidently killed by seawater. In such cases, flotation in the sea, however prolonged, is of no possible value to the plant and can be thought of as evolutionarily 'accidental'. Others are known to be sea-dispersed in a viable state, but a drift journey of several months seemingly exceeds their longevity.

Even for those seeds retaining viability throughout long drift journeys, establishment on far-flung temperate shores is impossible for climatic reasons. A viable nickar seed has even been recorded on subantarctic Macquarie Island (Costin, 1965), too cold for the survival of any trees or shrubs. Though of no direct ecological consequence, such examples nevertheless demonstrate impressive seed dispersal ability, and provide interesting curiosities for the botanist and the glasshouse gardener.



VI  
Seeds of *Entada* sp. from the Australian Coast - E. Charles Nelson

Kenneally (1972) discussed the seeds of tropical plant species washed ashore on the coast of Western Australia. Among the specimens noted by him were seeds of *Entada* (Mimosaceae); it is impossible to identify the seeds to species level.

*Entada* is a genus of tropical rainforest lianes, native in the Indonesian, Philippine, and Fijian archipelagos, in the Malay Peninsula, Thailand and in Ceylon. The plants have long pods which contain several large seeds. The seeds are dark brown with a very hard, polished testa. Kenneally listed nine locations in Western Australia from which *Entada* seeds had been collected; from Perth to King George Sound.

In 1972 during a visit to Twilight Cove, a very isolated place on the Great Australian Bight about 250 km west of the Western Australia-South Australia border, I was given three seeds of an *Entada* sp. which had been collected over a period of several years on the beach. Mr M. Carlisle of Cocklebidy who gave me the Twilight Cove seeds, indicated that four seeds of *Entada* called New Guinea beans locally, had been noticed over several years at Twilight Cove. Three of these had been collected; a fourth seed had germinated but the seedling soon died. Behind the fore-dune on the beach at Twilight Cove there is a low-lying area where fresh water appears to accumulate; the seed may have germinated in this area. Another legume seed (black, c. 20 mm diameter) from the cove was also given to me; it could not be identified and rotted when planted.

In April 1974, a single seed of *Entada* sp. was collected by Max Campion (Australian National University) on the beach at Moruya on the south coast of New South Wales. The seed was found among debris at the highwater mark following a storm, and was associated, on the beach, with pumice thought to have originated in the Tongan archipelago.

*Entada* seeds, if nicked or scarified, will rapidly take up water: sand-blasting on an exposed beach would probably be sufficient to allow the outer impervious layer of the testa to be ruptured and water to be absorbed. To assess the viability of the other seeds, attempts were made to germinate them at the Australian National University, Canberra.

A single seed was placed, without treatment, in a moist mixture of sand and peat; it did not germinate. It was then scarified using a coarse sandpaper, and replaced in the moist soil. The seed absorbed water and eventually the testa split and the radicle emerged. However, the embryo was attacked by fungi and rotted; it was found that the cotyledons were also attacked by fungi and were cracked and rotting.

A second seed was treated in a similar fashion, but was planted on moist vermiculite. When the radicle emerged, the testa was removed - it is very tough and leathery when moist and had to be cut away carefully with a sharp scalpel. The cotyledons were cracked, but not broken, and the outer central portion of one was covered with a fungal mould. The cotyledons were swabbed with 70% ethyl alcohol to attempt to sterilise the surface and the whole was replaced. Development proceeded, but care was taken to prevent further fungal attack. The radicle developed rapidly, showing strong geotropism. The plumule was red-brown in colour initially, and there were no leaves. The cotyledons became green.

For several months no leaves were produced, but after six months leaves appeared; these are compound with lateral leaflets and a terminal tendril. Germination occurred in March 1973, and by November 1973 several pairs of leaves were present. By April 1974 the plant consisted of a long liane about 10 m in length with many pairs of compound leaves. No flowers were produced. The plant was grown in a vermiculite-peat mixture, indoors in the Department of Biogeography and Geomorphology at the Australian National University in Canberra; it was still alive when I left the University in July 1975 and remained a feature of the stairwell for several more years.

From this it may be concluded that the seeds are viable on reaching Australia; each seed that was allowed to germinate did so. However, there would appear to be some internal damage to the cotyledons caused by the buffeting of the sea.

The seeds from Twilight Cove probably reached the beach on the current that circulates in the Great Australian Bight. It would appear that the seeds entered the Bight from the Indian Ocean on the currents that carried the seeds noted by Kenneally (1972) on the south coast of West Australia. Their place of origin must remain in doubt, as identification of the seeds is not possible beyond generic level.

The Moruya seed probably came south along the eastern coast of the continent, this will have been the pathway of the pumice. The seeds could have come from New Guinea or the Fijian islands.

The third Twilight Cove *Entada* is still in my possession, a souvenir of an isolated beach. It is a rich chestnut brown, with a somewhat 'square' profile, not heart-shaped like *Entada gigas* found on Irish beaches.



## Acknowledgements

I would like to thank the manager of Cocklebidy Hotel, W. Australia, for bringing the Twilight Cove seeds to my attention, and to M. Carlisle for giving me information on their places of discovery. Max Campion collected the *Moruya* specimen, during a field survey on that beach.

## References

- Costin, A.B. (1965). Long-distance seed dispersal to Macquarie Island. *Nature (London)* 206, 317.
- Gunn, C.R. and Dennis, J.V. (1976). *World guide to tropical drift seeds and fruits*. New York.
- Kenneally, K.F. (1972). Tropical seeds and fruits washed up on the south-west coast of Western Australia. *W. Australian Naturalist* 12, 73-80.
- Nelson, E.C. (1978). Tropical drift fruits and seeds on coasts in the British Isles and western Europe. I. Irish beaches. *Watsonia* 12, 103-112.
- Nelson, E.C. (1983). Tropical drift fruits and seeds on coasts in the British Isles and western Europe. II. History and folk-lore. *Scottish Naturalist* 1983, 11-63.
- Nelson, E.C. (1989). Exotic drift fruits and seeds from the coasts of Britain and adjacent islands. *Journal of the Royal Institution of Cornwall* (in press).
- Sloane, H. (1696). An account of four sorts of strange beans. *Philosophical Transactions* 19, 298-300.
- Smith, J.M.B., Heatwole, H., Jones, M. and Waterhouse, B.M. (in press). Drift disseminules on cays of the Swain Reefs, Great Barrier Reef. *Journal of Biogeography*.

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## Postscript

We would welcome information from any source concerning tropical drift-seeds on European, Australasian or other beaches. Especially helpful will be notes on dates and localities of collection, and if seeds are extant we will be pleased to identify 'unknowns'. A worldwide reference collection of seeds is held in the National Botanic Gardens, Glasnevin, and a similar one, primarily of Pacific seeds, is in the Department of Geography, University of New England, Armidale, New South Wales.

While we will certainly not discourage gardeners from growing drift-plants, please have the seeds identified before germination is attempted.

Lastly, the ancient craft of snuff-box manufacture, employing *Entada gigas*, has recently been revived on Innisboffin, County Donegal. Neal MacGregor has collected seeds from local beaches, and chased them with silver to make some exquisite boxes.



MOIRA REID OF MOYCLARE

Twenty five years ago, the first spring after my return to Cornwall after nearly thirty years serving the Crown abroad, I was carrying my first ever exhibits into the City Hall in Truro for the Cornwall Garden Society Spring Flower Show, when I heard what sounded like an Irish voice behind me calling "Hi, young man, you can carry these in for me." Turning, I saw a little lady with two large flower boxes, and an imperious manner, so I did as I was told. This was my first introduction to Moira (Mrs Louis) Reid, a very distinguished plantsman and gardener, and now the longest serving member of the Executive Committee and a Vice-President of the Cornwall Garden Society, in which capacity she has consistently championed the cause of new exhibitors and the owners of smaller gardens. A challenge cup, which she presented in memory of her husband, was initially intended to be competed for by such exhibitors.

Moira was a Knox, a Protestant family from the North, living at Clonroad House, a large house with a big garden on the River Fergus in County Clare near Ennis. She was educated at Alexandra College, Dublin, where she spent eight years and took the botany and horticultural courses, and held the Lady Ardilaun scholarship for several years. She was there at the time of the Easter Rising, and at one stage at the age of 16 she was held as a hostage by the IRA. While still at Alexandra College, she became engaged to a friend of her father, in the Customs and Excise, who came from Co. Kerry. After Independence, Louis Reid stayed on until 1926 to assist with the training of the new intake of staff for the Irish Free State, and then he was transferred to Cornwall and posted to Liskeard.

They were married in June 1927, and came to live at Liskeard, where the previous year they had bought a corner of a field on the outskirts of the town, and there they built a house and at once began to make a garden. Ten years later they were able to buy an adjoining piece of land to bring the area of their garden up to one acre. This became Moyclare; as a girl, all her family called her 'Moy', and as she came from County Clare, Louis thought Moyclare a very good name for their home. Next door, at a house called Trevillis, there lived a rather formidable lady, Mrs Foster, with four daughters, all keen field botanists, and they were the Reids' first callers, disclosing that Mrs Foster's sister was Mrs Vera O'Brien of Ballyalla House, also near Ennis.

Up to the outbreak of World War II, golf, bridge, tennis and dancing took up a lot of their spare time, but then Louis became a major in the Home Guard and Moira an ambulance driver, which involved driving in and out of Plymouth during the 'Blitz'. After the war, Moira joined the Women's Institute, which discovered that she was a qualified teacher and demonstrator, and she was soon on the County Panel for ten different talks or demonstrations. She also started the Flower Club in East Cornwall, an Arts Club and the first WI Market in Cornwall. She is an Honorary Life Member of the Liskeard Horticultural Society, and was at one time District Commissioner of Girl Guides.

Moyclare is a fascinating garden, full of rarities and good forms of trees and shrubs. It was included in *The Englishwoman's Garden* and has several times been featured on television and on radio. Among other treasures is the only plant of *Camellia x williamsii*, recently registered and named 'Moira Reid', originally given to Mrs Reid as a seedling by the late Mr Charles Williams MP of Caerhays Castle, which is now a fine upstanding and very floriferous bush.

Moyclare receives frequent visitors during the summer, and Mrs Reid pioneered a scheme for selling packets of seed of unusual plants at all the Cornwall Garden Society functions, the proceeds from which go to pay the Society's annual contribution to the National Council for the Conservation of Plants and Gardens.



## MOYCLARE - OR CRAMMING THEM IN AT LISKEARD

In 1927 my husband and I bought one third of an acre of rough meadow on the outskirts of Liskeard, before the days of the common market and the impossible hectares. Very newly-married, we had been planning our house since we became engaged and it was fun seeing it grow up from the field. We hadn't planned the garden nor have we since. Like Topsy 'it just grew'. Being new to Cornwall we had not realised the force of the westerly gales. If we had, the entrance gate would have been in a different place. As it is I have shelter everywhere else but the westerlies roar up the drive and do a great deal of damage.

Another thing that had not occurred to us then, was that by planting trees all round I have turned the garden into a perfect frost pocket. We are below the level of the town and the cold air drifts down, hits the tall trees in nearby Trevillis, and settles in my garden. Snow often lies for a couple of weeks after it has vanished from the surrounding fields.

Ten years after our original purchase we were able to buy an L-shaped piece of land on two sides of our corner site, which brought it up exactly to an acre. I had been deeply interested in plants and gardening from an early age. My parents were dedicated gardeners and, as a small child, I followed our old head gardener around and learnt much from him. From the beginning my husband and I had been determined to have an all-the-year-round garden because we had been surprised, when visiting many famous Cornish gardens, to find practically nothing in them but masses of green foliage from June onwards.

With such a small area it was most important to study each shrub and tree, as to the length of its flowering period, its foliage and if it had autumn colouring and/or berries as well. Flowering cherries and lilacs were of no use, perhaps ten days of beauty, gales permitting, then gaunt trees with masses of dull leaves to pick up in the autumn. Compare them with *Cornus kousa* var. *chinensis*, a graceful small tree laden with interesting flowers, that turn into strawberry-like fruits with the most wonderful leaf colouring that lasts well into the autumn. Or the variegated *Cornus mas* with yellow winter flowers and lovely foliage often followed by colourful fruits.

I became a friend of Margery Fish, who gardened in Somerset and wrote widely on plants and gardens. She stayed here more than once and we shared a love of variegated plants. For years we exchanged with each other so I have a great many of these colourful plants, to the joy of my flower arranging friends and the despair of some pundits who go round muttering "Virus, Virus!". This garden has always been overplanted as I can't resist a tree or shrub that attracts me. Every now and then I have a real 'blitz' and dig up or move surprisingly large specimens. Once we had a boring *Lonicera nitida* hedge between the house and the vegetable garden, needing constant pruning and spreading its roots into the bean trenches and far away. One day I had some extra help and we tore it up, dug the site and went round the garden shifting large rhododendrons, conifers, privets of gold and silver, roses and clematis. We planted them in a long solid mass and I always enjoy looking at that 'hedge' as there is always something of colour and interest. Heathers, cyclamen and primroses add interest on the ground and *Tropaeolum speciosum* adds to the clematis and roses that scramble through the trees and shrubs. It never takes any maintenance at all, at all, except the occasional dead heading.

Most beds in this garden are deliberately planted far too closely. I never want to see any bare earth at all. I am often surprised at the way many plants will flourish in close harmony. Opposite the hall door, in a space perhaps six to eight feet square, is a towering *Cotoneaster* 'Cornubia', laden with scarlet berries and growing through an equally tall Winter cherry (*Prunus subhirtella* 'Autumnalis'), a mass of bloom as I write on December 10 and still bearing some colourful autumn leaves. At their feet there are the yellow blooms of *Mahonia aquifolium* and some late hydrangeas. In summer the upper branches of both trees are wreathed in a large pink climbing rose, 'Gandy's Coral Satin' and a white clematis. At their feet in spring are snowdrops, cowslips and other low growing plants. Another success on the drive is a large *Berberis darwinii* with a *Clematis* 'Nellie Moser' over the top mingling with a tiny pink rose known as 'Pom-Pom de Paris'. I never prune any of the clematis at all, except at long intervals if they are getting too heavy for the supporting tree.

Like most Cornish gardeners I try to grow plants that are really too tender and three times, in 1947, in 1963 and in 1979, the garden has been badly hit. *Leptospermums*, acacias, grevilleas, correas, callistemons, phormiums, mahonias, hebes and olearias were all destroyed, or seemingly so. There's little time to dig out all the stumps and once or twice I have had a pleasant surprise, as when a *Mahonia lomariifolia* and a couple of cordylines shot from the base after two years with no sign of life and phormiums, that looked like piles of rotting hay, grew out after a year or more. But these tender plants are well worth the risk: after all not every horse one backs is a winner!



Inspired by Jim Moffat of Penheale I planted in one bed against a north wall a pyracantha with yellow berries and *Lapageria rosea* 'Nashcourt'. Both have flourished and give weeks of colour and interest from October to Christmas. There is a very good photograph of them in *The Englishwoman's Garden*. I must confess that I am still slightly surprised to be included in that book at all, partly because the garden is so small and partly because I am not English at all, at all, being Irish! But I'm not the only Irishwoman in the book.

I grow ivies up most of my big conifers, variegated ones, and over sheds. Some people think they will choke the trees and damage walls but if you are over 50 - I am 78 - I don't think you need worry.

Hollies too; a much neglected group, mine are nearly all variegated. My special favourite is *Ilex x altaclerensis* 'Lawsoniana', with large beautiful leaves of green and gold and cream. Far, far, better than any *Elaeagnus* in every respect. It is the longest lasting shrub in water that I know; sprays put in my Christmas arrangements often last till Easter. So many of them drip down gracefully and are thus wonderful for pedestals. When added to no thorns, no reversion and none of that exudation of oil that makes it necessary to wipe each *Elaeagnus* leaf and it is quite a quick grower.

It's extraordinary the length of life of some plants. When I came here as a bride in 1927 I brought some plants from my home that are still flourishing. One was a very large lily-of-the-valley, said by Neil Treseder to be larger than 'Fortin's Giant', and it has a very strong perfume. Also a red climbing rose, with a lovely scent, very early flowering and goes on intermittently until Christmas. It is 'Ards Rover' that was mentioned in Dean Hole's book of roses published about 1900: also a charming blue Michaelmas daisy, *Aster cordifolius*, that doesn't need staking, spreads hardly at all and does not get mildew; its fine flowers look rather like a blue *Gypsophila*.

It cannot be said that they, or any others, are fussed over. On the south wall of the house there is a mass of plants growing, in a bed about six feet by three feet, many of them to the top of the two storey house. They include *Camellia* 'Madame Le Bois', through which grows 'Ards Rover' and *Solanum jasminoides* 'Album', the scarlet flowered *Berberidopsis corallina* and *Clematis* 'Nellie Moser'. They have to be cut back every two years or so or they will block the gutters. More recently I have added a golden *Sophora* and the crimson *Salvia grahamii* with a collection of cheiranthus and watsonias at their feet. Nearby *Cestrum* 'Newellii' has survived for years with its base protected by *Daphne odora*. It was killed to the ground in 1963 and 1979 but is now again about 12 feet high. This south wall never gets painted as there are also more clematis, a 'Gloire de Dijon' rose, winter jasmine, a huge *Trachelospermum jasminoides*, *Abutilon* 'Kentish Belle' which came from Ince Castle and flowers for months, as do two others, *A. megapotamicum* and its variegated form.

Do not think I grow only large shrubs and trees. The garden is packed with small treasures; double primroses, gold lace polyanthus, violets old and new, variegated London Pride and variegated strawberries used as ground cover. There are tiarellas and telimas in deep shade, ferns, many other herbaceous plants and numerous variegated plants including yuccas, phormiums, lily-of-the-valley, Solomon's seal, fuchsias and lots more. Hydrangeas are everywhere from the dainty *H. serrata* and *H. thunbergii* to 'Ayesha' with flowers like a large lilac.

One thing we did plan, all those years ago, being faced with a flat site was to plant so that the garden could not be seen at one glance. Something new round each corner, the back of a bed quite different from the front and lots of evergreens to hide one part from another. As a result many visitors think that the site must be more than an acre.

My only help is George, who is a bit older than I am, who comes in for eight hours a week except when he has "the screws"; then his son comes at weekends to cut the grass. So I have little time to walk round with individual visitors but parties of about a dozen or more are always welcome, particularly after the spring rush when so many want to come. They miss some of the most interesting plants that flower or fruit later in the summer and autumn. Many of these are shown at the winter lectures of the Garden Society and I do wish more members would bring more of their treasures. Small things are particularly welcome as they can be planted in even the smallest gardens which are all that many have nowadays.

[Reprinted from the Journal of the Cornwall Garden Society by kind permission.]



# GLEANINGS FROM CORNWALL SOME LETTERS FROM MOYCLARE TO GLASNEVIN

Over the past few years Moira Reid has corresponded with me, especially about those Irish cultivars known to her in Cornish gardens. As her letters often contained interesting information about the origins of these plants, and frequently included asides about other gardening topics, I have edited, with Mrs Reid's permission, portions of the correspondence. The extracts are printed here in chronological sequence. The printed text closely follows the original letters, although substantial portions of personal material have been deleted.

E. Charles Nelson



2 June 1984

I was very interested to see your note in the N.C.C.P.G. Newsletter No. 4, which has just reached me. I do have *Callistemon* 'Murdo MacKenzie' (I am grieved to hear of his death, he was such a nice man). I also have the rosemary 'Fota Blue', *Griselinia* 'Bantry Bay' and a willow-leaved bay tree, given me by Mr and Mrs Bell [of Fota], all because it was my husband and I who persuaded Neil Treseder to join us for a holiday touring southern Irish gardens; it was his first visit to Ireland, and he was enchanted. Our friendship goes back to before the War, and he gave me the plants as souvenirs.

I had introductions to a lot of garden owners and they were very kind. We visited Fota. We went to Derreen, Viscount Mersey's, Anne's Grove, those two gardens near Sneem on the Kenmare River, one owned by the Browns [Garinish], I forget the other owner's name [Walkers; Rosdohan], Glanleam owned by Col Uniacke, Garinish Island, where we saw that wonderful *Callistemon* when Murdo took us in for sherry, and Muckross.

Andrew [Treseder] went to Donegal to landscape some huge garden and brought back a different *Osteospermum ecklonis* 'Lady Leitrim' which he gave me. Is this plant of Irish origin?

Did you see under the Cornish entry in 'News from Groups' about *Senecio* "greyii" 'Moira Reid', is that of any interest to you? You can have some if it does qualify. I know it was born in an English garden, but there is no overlooking the Irishness of the owner! I have now had plants back from Cannington and you can have it if you want, but be warned, it's a miffy plant, that will die for no reason at all. There is a broom also, a very pretty pink that appeared from seed, in this garden. All our National Trust gardens have it, and label and list it as 'Moyclare Pink' and I've seen it in some catalogues as well.

I should love a plant of the *Escallonia* 'Bantry Bay'. Neil used to sell a *Leptospermum* he got from Murdo, called after the owner of Garinish, was it Ronald Bryce? [*Leptospermum* 'Rowland Bryce'].

17 June 1984

I cannot think why the Rowland Bryce *Leptospermum*, the Fota rosemary and the Murdo Mackenzie *Callistemon* have vanished. Treseder's were listing them in their catalogues from 1971 to about 1974 and several people in this county must have bought them. My R.B. *Leptospermum* was killed in the 1976 bad winter, but they did survive in many of the gardens down West. Tomorrow the Cornwall Garden Society has a conservation committee meeting and I'll start the search there, as the more sources you have the better and my Fota rosemary is a very weak plant. What ever happened to Murdo's original tree [*Callistemon*] that grew near his own house, not in the garden itself. I saw it twice there, when he took us in for drinks or tea and it was the largest specimen I've ever seen and bursting with health. I will keep a good plant I have in a pot of 'Lady Leitrim' for you; yes, it was the old Lady Leitrim that gave it to Andrew Treseder who gave it to me. You certainly can have material of 'Ards Rover' and the *Senecio*, though I don't think much of the latter.

I hope you have time on your hands as I am going to tell you the history of my lily-of-the-valley, which Treseder's and the other nurseries used to buy from me every year. Neil swore it was much larger than



'Fortin's Giant', also more fragrant. I enclose the only two sprays I can find as it's well over and this awful drought has kept it small, these were under a rhododendron, which isn't an ideal bed for it, I consider them much smaller than normal.

When I was a small girl (a hell of a time ago) I was one day standing with my father, on the drive of our house, when a dogcart drove in with a large laundry basket at the back; it was driven by Mr Carey, a cantankerous old bachelor and a noted gardener, who had a lovely house burnt to the ground in 'The Troubles' about 1922 (he was long dead by then). Anyway he said to my father, "Knox, you are the only gardener in the country who has never pestered me for my lily-of-the-valley though I know you wanted it, so here is a hamper of it for you. I know I'm going to die soon, so look after it. But you must promise me first never to give or sell it to anyone in County Clare or County Limerick for I hate the lot of them!" Daddy promised and Mr Carey turned to me and said, "Child, you are a witness of your father's promise, don't let him forget it" and, before we could get over the surprise of it all, drove off refusing a drink or any normal hospitality. And he was found dead in his library a few days later and no one knew what he had done to his lily-of-the-valley bed before he died, for it was like a devastated area and practically none survived.

I am 78 now and I think I must have been 5 or 6 then and I've never forgotten a bit of the event. I brought some over when I came here as a bride in 1927 and after my father was killed in 1935 felt free to do what I liked with it. But if you do have some and you are welcome to it, it's the first that will have gone back to Ireland.

[I did get it, and none will go to Limerick or Clare!]

6 August 1984

What a lovely surprise when your enthralling book *An Irish Flower Garden* arrived on Friday ... I wish you were within range to argue over one or two minor points, for instance on page 15 you say the red-flowered *Arbutus* doesn't set fruit abundantly; well, mine is just laden with fruit every year, and is greatly photographed by people who see it at that time. This tends to annoy as well as please me, because I had three of the ordinary *Arbutus*, that became invasive trees, flowered well, and had so few fruit I used to count them, and they rarely exceeded ten! I have now cut them down as this garden is too small for trees that don't perform as expected

.... It's been the driest period for 90 years, scarcely any rain since February [1984], no hose pipes allowed since May and we are now threatened with the water being turned off for 17 hours a day!! I have a range of containers under the scullery and bathroom windows and siphon off my bath water and practically all the water used indoors. I was exhausted carrying water to plants. I thought my *Cornus controversa* was dying as all the leaves were shrinking up, but we had a cloud burst on Wednesday that did a lot of good and I carried water to it daily for weeks, and it now looks much better. But I feel sure several of my largest rhododendrons will die and my precious double primroses look quite dead and I've treasured them for years. The lawns are like brown sacking and my dahlias that are usually taller than myself are about 18" tall!!

I will root some *Osteospermum* 'Lady Leitrim' for you, and *Senecio* 'Moir Reid' .... We both think that seed of the *Callistemon* should mainly come true as there is no other *Callistemon* on that side of the house at all .... Have you any advice on germinating *Tropaeolum speciosum*, the Scotch Flame Flower? I collect about a tea cup full of seed each year but have no luck at all in germination.

28 October 1984

I have got together some plants ... I do hope they survive. I have packed them as carefully as I can ...

1. Mr Carey's Giant Irish lily-of-the-valley. You could have a sack of this, it's invading the place, but I dare not ask strangers to take more.
2. [*Rosmarinus*] 'Fota Blue' ... it's all I've got left of the original, it's tender, and I've lost the parent plant in 1976 and again a couple of years ago. This was the only cutting that survived and I planted it against the south wall of the house, and alas I didn't notice it was being choked to death by *Iris stylosa* (you will have to bear with out-of-date names, the new ones are so ugly!).
3. *Senecio* 'Moir Reid'. Here is one of the three plants Roy Cheek of Cannington sent me as mine had not survived .... It was [Roy] who named it, but it's never been registered, nor has the *Camellia* called after me. I am too old to bother and I can't afford taking them to London. I wish they had been born when I was half the age I am now, as I could have dealt with it then. The *Senecio* was a sport on an ordinary bush, and the *Camellia* one of the



seedlings I grew from a handful of seed Charles Williams himself gave me out of his pocket when I was there to tea in the late 1950s or early in the '60s.

4. 'Ards Rover' rose. I enclose one rooted cutting, all the rest of that lot failed and all the material I could reach by leaning out of my bedroom window. It grows so high that I can reach it no other way. There was no one in this weekend that I could get to hold me, or to put up a long ladder, and I dare not risk a fall. My builder is coming one of these days to mend the roof and he is a gardener and I will get him to get some and I'll try and root them for you.
5. *Osteospermum* or *Dimorphotheca* 'Lady Leitrim'. I enclose a couple of plants, and will root more as an insurance for the winter. Andrew Treseder, Neil's son, ... gave them to me; ... he had two or three visits to the north of Ireland and got on well with old Lady Leitrim who gave him the original plant at Mulroy on one of his visits. He was either taking plants over to or helping landscape a wonderful garden in Donegal, or both. I've forgotten the name, could it be 'Glenveagh' or something like that.

Next time you are in Cornwall allow a little more time here and see what you can dig up out of my subconscious! One of the things that did float up after reading with great interest your lists of double primroses was that long ago my sister was living in Tralee, she was a keen gardener as I am, she took me over to Milltown to tea with the rector's wife, who collected and bred double primroses, the place was overrun with them in hedges and paths and the vegetable garden as well as in beds, they must have had far more stamina and the will to live than those today. My sister is dead, alas, but her daughter thinks it was a Mrs Goddard or Goodall or some name like that.

I think I can track Mrs Goddard if that was her name down for you, given time. She used to write for a charming magazine called *My Garden*, edited by Theo Stephens, one article was about Mr Carey's lily-of-the-valley, and the bride who took it to Cornwall. I am sure she wrote about double primroses as well.

Thank you for your advice about the *Tropaeolum*, I shall have to buy some bantams! I want more advice on seeds. *Callistemon* 'Murdo McKenzie' flowered well this year and has a lot of seed on it; it's the first time it has flowered. The seed heads are still a pale brown colour and tightly shut. At what stage do I take them off, and would you like some? There is no other *Callistemon* that side of the garden, so they might come true. What do you think?

I am still dipping into your entrancing book and always find something of interest. Did I tell you I was at Alexandra [College] from 1919 to about 1926 or early 1927, when I left to be married ... so I was most interested in your references to Miss White. I was a real protégée of her's due to my regular winning of the Ardilaun Scholarship for Horticulture and the Botany Scholarships and she used to take me out to tea with Lady Ardilaun at St Anne's, Clontarf, nearly every year. But I must stop, you'll be bored stiff with all this saga of past history.

[A few years passed, and the letters continued intermittently. In 1987 Moira writes about her own sparkling garden, with her marvellous good humour.]

I am now 81, have no skilled help in the garden, and a constant stream of visitors, so I must keep it as tidy as possible! By evening I'm too tired to do more than eat (unlike most men it is I who have to buy the food, prepare it, and clear up afterwards). By then I'm ready to fall into bed, where I sleep like a rock.

I am hampered these days by arthritis in my ankles but I get along quite well on my knees with the help of the kneelers with supports each side. I still drive the car and go over to Ince to see Lady Boyd regularly, and she comes here. In the autumn her new head gardener thoroughly tidied a big greenhouse that was a jungle of strelitzias, abutilons, lemon trees, etc, all draped with rare and spectacular climbers and on at last getting to the back wall found a large and healthy specimen of *Callistemon* 'Murdo McKenzie'! They are now rooting cuttings for you. Don't say if you have already got some, a few more won't go astray amongst your friends.

Despite all his activities Walter Magor most kindly took steps to get my *Camellia* 'Moira Reid' registered and there it was, in print in the *Camellia Society's* magazine or handbook or whatever they call it.

The garden was on television twice in October for half an hour each time under 'Gardens for All' and I have been quite astonished at the number of people who wrote or phoned to say how professional I sounded, no nerves and they could hear every word! It was fun, I enjoyed every moment, but was rather staggered that it took two great vans, the size of large coaches, fourteen people and the presenter Terry Underhill, miles of cable and arc lights and though the sun was shining, they arrived at 9.15 and left at 5.30!! However, they took me out to a hotel for lunch in the middle, all sixteen of us, which created quite a stir in this small town! So far, we've had a very mild winter but what a wet and windy one. I usually go round on New Year's Day to see



what my garden has for me, and was pleasantly surprised. *Lapageria* still wreathed in lovely pink bells, winter cherries, jasmine, *Iris stylosa*, violets, primroses and polyanthus, laurustinus [*Viburnum tinus*] 'Eve Price' and [another] viburnum and a mass of bloom that tall fuchsia 'Kare Herbst', *Rhododendron* 'Nobleanum' a mass of crimson bloom, odd roses and a curtain of white bloom down one wall of the house of *Solanum jasminoides*, pansies, *Cheiranthus* 'Bowles' Mauve', *Eupatorium micranthum* or Mexican incense bush, winter jasmine and a wealth of berries still untouched by the birds, even cotoneasters, pernettyas and skimmias and the yellow *Cotoneaster* 'Rothschildiana' and *Cotoneaster* 'Exburyensis'. I even found a clump of sweet scented narcissi known in the trade as "Scilly Whites" in bloom and of course *Garrya* and witch hazels. Lenten roses in bud, but alas, no Xmas roses, my plants have vanished, and no white *Iris stylosa*.

Quite an entry for that nice *Irish Gardener's Diary* but it's usually the end of this month that winter really hits us doing so much damage due to plants being full of growth and sap. I also have *Abutilon* 'Kentish Belle' and *A. megapotamicum* in full bloom and a few winter camellias and "November Pink".



## DAPHNES IN AN IRISH CONTEXT

In these days of smaller gardens, dwarf shrubs are of especial value, particularly if they are tolerant of alkaline soils. Our garden is on limestone, so we cannot avail of the many beautiful low-growing rhododendrons, and most of the heathers are also unsuitable. Daphnes, however, have done well with us, in shrub borders, in the rock garden and two of the smallest thrive in stone troughs.

Most people know *Daphne mezereum*, the deciduous species that can grow five feet high according to the books, though three to four feet is as much as we expect. The branches are densely clothed with fragrant reddish-purple or white flowers in February-March, before the leaves appear. These are followed by red berries (yellow in the white flowered form) which gave us self-sown seedlings for the first two or three years after planting. Then the greenfinches found the bushes and now the fruits are eaten before they are ripe. If we want to propagate this daphne we have to net the bush. The berries should be sown as soon as they are ripe to get germination the following spring. Even so, only a proportion of the seeds come up the first year, and if more seedlings are wanted the seed tray can be kept for another year. The tray is best left out of doors, say, under a north wall, for a warm greenhouse can inhibit germination. Once the seedlings appear they may be brought under cover to hasten growth.

Although *D. mezereum* is a rare native of English woods, it flowers far more freely in an open position in our garden; perhaps this is a response to our cloudy climate. Though this and other daphnes are not supposed to transplant well, we succeeded in bringing our bushes with us when we moved house. As on previous occasions we noticed that bits of root of *D. mezereum* left behind, sprouted. No doubt this species could be propagated from root cuttings, but this is not advisable as it is liable to become infected with virus, fortunately not carried in the seed. How, then, to propagate the various forms recorded in the literature? We have been given a seedling of *Daphne* 'Bowles' White' and hope it will come true. The variety *autumnalis* has always been extremely rare, and unless seedlings come true is likely to remain so, as is the double red and double white - if they are fully double they will not set seed.

*D. bholua*, in the form we grow, has been a delight. Our six-year old bushes are three to four feet high and are semi-deciduous. They may start flowering before Christmas, and early in the New Year are covered with white, pink-tinged flowers which scent the air if we have a warm day. One of our plants is grafted on to *D. mezereum*, the other on to the evergreen *D. tangutica*. So far the former has been the more floriferous and more deciduous. Though fairly sheltered, our plants are not against a wall, as was a specimen some eight feet high seen in the south of England. It appears that provenance has an influence on hardiness, and two or three cultivars have been named in England.

We grow two deciduous yellow-flowered daphnes. Of these *D. jezoensis* is a recently-introduced Japanese species. It has the curious habit of losing its leaves in summer. They appear again in early autumn, to be followed by the yellow flowers in winter. Plants we have seen grown under glass were strongly-scented, a feature not so noticeable outside. We have not had our plant long enough to know if it is really going to thrive. As this species has been described as enjoying peat and leaf mould, we worked peat into the soil before planting.

The other deciduous yellow flowered daphne in our garden is *D. giraldii*, of *mezereum*-like habit of growth but flowering while in leaf (June). Our plant is still young, and though attractive in flower is not large enough to show its full character. As this species is praised by various authorities, we look forward to its further development.

*D. cneorum*, called the Garland Flower, was a great success in our former garden in Malahide, Co. Dublin, where the prostrate mats were hidden by the very fragrant flowers, rose-pink in colour. Though the plants survived the move, they have never been so good here in the midlands. We have started again with young plants, encouraged by the good growth of the variegated form acquired since we came here. The variegation is not intense, the leaves being slightly margined with silvery white. In a trough the small white form of *D. cneorum* has done very well, despite the shock of transplanting.

*D. blagayana* has done better here than in Malahide, perhaps due to being planted in a more open place where it has grown into a plant four feet across, with heads of fragrant flowers in spring. So far we have not piled stones on the branches to layer them, as is usually recommended, so the plant is nicely bushy, with erect stems. We have given a top dressing of beech leaf mould, with, we believe, beneficial effect.



*D. arbuscula* was another transplanting success, especially as the plant had an unexpectedly deep root which snapped off. However, the plant re-established well on a south slope in the rock garden, where the low mat of dark, narrow leaves is pleasing in itself, set off in spring by the deep rose-pink, scented flowers. We would regard this as an essential small shrub for the rock garden.

In a border below the south wall of the house we grow some taller daphnes. Of these *D. collina* is especially pleasing in the rounded form of the bush, as neat as if it had been clipped. The rosy purple flowers appear in spring but often there are a few flowers in autumn also. Close by is the allied *D. sericea*, with somewhat pinker flowers and narrower, less silky leaves. It lacks the very neat habit of *D. collina*.

*D. tangutica* and *D. retusa* are another two species which differ most obviously in habit. For this reason we prefer the latter, as it forms a neater, more compact bush. Both have dark, evergreen leaves, large for a daphne, and flower mainly in spring. The scented flowers are followed by red fruits, which are soon taken by birds, but not before they ripen.

A number of hybrids have been recorded between various species of daphne, but the only one that seems to have become at all common is *D. x burkwoodii* (*D. caucasica* x *D. cneorum*) 'Somerset'. There are other clones resulting from this cross, but we have never seen them, nor the *caucasica* parent, once grown by Smith of Newry. 'Somerset' is a pleasant shrub with rose-pink flowers in June on a four foot bush. Like several other daphnes it is of great value for the front of the shrub border, or for a small garden.

*D. petraea* 'Grandiflora' is highly prized by alpine specialists, and is usually grown in the alpine house. We are pleased with the way it has established for a few years now in a stone trough, though with the precaution of a cover over it in winter to throw off excess rain. Our specimen is grafted on to *D. mezereum*, so an occasional sucker from the rootstock has to be removed, but not often enough to reduce our pleasure in this dwarf shrub with its pink flowers.

*D. laureola* and *D. pontica* are two cinderellas of the genus. Both are rather dull evergreens, with yellowish-green flowers. Their value is for difficult shaded places, such as near beech trees in this garden. We grow a rare species of this group, *D. albowiana*, raised from Russian seed. It is interesting in having red fruits instead of the black of the last two species.

It only remains to mention *D. odora* to complete the list of daphnes we have grown here. Typical *D. odora* is said to be tender and was once appreciated as an intensely fragrant shrub for conservatories. A recently-acquired plant of the hardy form 'Aureo-marginata' is doing well but has not yet flowered.

We have lost two species in the past. We do not mourn *D. gnidium*. The flowers were but whitish, and anyway the plant is not really hardy. We do regret *D. jasminea*, a prostrate plant with white flowers which came to us just before a hard winter which killed it.

There are many other daphnes we would like to try, some of them excessively rare in cultivation. What was that daphne covered with white flowers we saw on low cliffs in southern Yugoslavia? Perhaps it was a superior form of *D. alpina*, a species not usually one of the best. There was no seed at that time of year and not even a seedling could be found. What has become of the many good hybrids mentioned in the literature? Incidentally, it would be interesting to know why some of the best daphnes never seem to set seed in gardens. These include *D. cneorum*, *D. collina*, *D. sericea*, *D. arbuscula* and *D. blagayana*. Clonal sterility may be involved, but in the case of *D. cneorum*, at least, more than one clone is cultivated and somewhere these should meet.



## MURRAY HORNIBROOK (fl. 1905-1942): THE FATHER OF DWARF CONIFERS

In the Rock Garden of the National Botanic Gardens, Glasnevin, Dublin, there still exists today much of the original dwarf conifer collection donated in 1921 by Murray Hornibrook. The man and his collection have held for me a considerable interest, particularly as I was charged with the propagation of the Hornibrook collection while Assistant Foreman in the Nursery. In September 1985 I decided to research the background and work of the man but from the outset this has not been an easy task for he is - as I will show - one of the most elusive characters in the horticultural world. Murray Hornibrook is not listed, for example, in the most recent comprehensive dictionary of British and Irish botanists and horticulturists (Desmond, 1977).

I feel that I am only the most recent of many who have attempted to chart the career of Hornibrook. One other such person was H.J. Welch, author of *Dwarf and slow-growing conifers*. Mr Welch informed me that he undertook to trace Hornibrook's family in order to establish the copyright for a third edition of *Dwarf and slow-growing conifers*. All efforts by Welch failed to trace any living family. Undeterred, Humphrey Welch wrote his own authoritative work on the subject (Welch, 1966).

Apart from his being a native of Great Britain, I could discover little about Hornibrook's origins or early life and work. In 1905 he was appointed to the position of Resident Magistrate in Templemore, County Tipperary. In 1908 he moved as RM to Abbeyleix, Queen's County (now County Laois), and resided at Knapton House, two miles south-west of the village.

At Knapton, Murray Hornibrook built a rock garden and commenced planting a few dwarf conifers, and he found these plants so fascinating that he was encouraged to obtain more. He ordered plants from various nurseries in Britain and on the continent but discovered, on their arrival, that they often bore scant resemblance to the published descriptions. At that time dwarf conifers were enjoying a revival after a period of decline in popularity. This rise in popularity coincides with the emergence of the rock garden as a prominent feature of garden design. From 1870 onwards there was an increase in the number of new species and cultivars of trees and shrubs introduced into Europe from China and other places. To cater for the upsurge in demand from gardeners, nurserymen allowed their conifer stocks to decline. When the revival of interest in dwarf conifers happened in America and Britain, nurserymen turned to the continent to supply the increased demand. Thus the British market was flooded with continental impostors.

Against this background Hornibrook undertook his major work of tracing and verifying original forms and writing detailed descriptions of each cultivar to aid identification. The nature of his job as Resident Magistrate allowed him ample time to carry out his research. He travelled extensively in Ireland and Britain examining and collecting dwarf and slow-growing conifers. His initial task was to collect together in his garden at Knapton all the dwarf forms he could obtain from home and abroad. He compared them with each other and recorded their descriptions. In order to verify his own collection he endeavoured to trace the oldest specimens still in cultivation in botanical gardens and private collections. Throughout his book many references are made to the Irish and British collections he viewed. In the case of American collections these were checked by means of photographs and specimens sent to him by Professor Charles Sargent, Director of the famous Arnold Arboretum, near Boston. Unfortunately, little remains in the archives of the Arnold Arboretum to enlighten us about Hornibrook's contacts with Sargent (there is only one, unsigned letter attributed to M. Hornibrook). A more substantial but somewhat erratic body of correspondence is contained in the archives at Glasnevin.

Hornibrook's rambles in Ireland resulted in the rediscovery and propagation of *Picea abies* 'Clanbrassiliana'; the old plant found at Tollymore Park, County Down, he believed to be the original or a propagation from the original plant. Hornibrook reckoned the age of the Tollymore tree was 150 years in 1923. In 1911 he discovered *Picea abies* 'Abbeyleixensis' growing in a plantation of ordinary *Picea abies*. This was

'... a low, slightly domed cushion about eight inches high by twenty inches across and has increased very little in size in the intervening years. Its chief claims to distinction are its foliage and side branchlets. The former is rather long and fine and very pectinate in arrangement; the latter are all rather "curled over" giving each little branchlet the appearance of a small ostrich feather' (Hornibrook, 1929).





Figure 1. Rockery in The National Botanic Gardens in the 1920s shortly after The Hornibrook collection was received. Most of the dwarf conifer collection was planted on the left of the path and in the rockery. *Cedrus libani* 'Conte de Dijon' is the nearest plant on the rockery (centre). The stone pine still overshadows the rockery.

*Thuja occidentalis* 'Caespitosa' was found by Hornibrook growing in Glasnevin Botanic Gardens and was described by him in 1923. His correspondence with America resulted in the reintroduction to Europe of the true *Picea abies* 'Maxwellii'.

During his travels Hornibrook took numerous cuttings from fine specimens. These he propagated with considerable success, finding difficulty only in rooting cedars and pines. He constantly urged gardeners and horticulturists to buy only plants on their own roots, as grafted forms were likely to 'revert', the more vigorous stock taking over.

For Murray Hornibrook and his wife Gladys, 1914 saw the birth of their only child, Diana. The outbreak of the First World War halted his researches into the dwarf conifers on the continent. During the interruption of the war years, Hornibrook set about writing *Dwarf and slow-growing Conifers*, but continental Europe was not the only place to experience the upheavals of war. The tranquillity of Ireland was broken with the 1916 Insurrection aimed at achieving independence from British rule. The Insurrection led to the bitter War of Independence between the forces of the Crown and Irish freedom fighters. Servants of the Crown, such as Hornibrook, were in a vulnerable position, and he decided to leave Ireland.

To Hornibrook's credit he set about saving the plant collection built up over the years at Knapton. In 1919 he commenced donating his most valuable plants to the Botanic Gardens at Glasnevin. He continued to forward plants to Glasnevin during 1920, 1921 and 1922. In correspondence to the Keeper of Glasnevin, J.W. Besant, dated October 1922, he wrote:

'It was a great wrench taking up all my fine specimens but I am glad to think that these added to those already sent to you will make Glasnevin contain the finest collection of dwarf conifers in the world and that my efforts to collect them during 10 past years will not be in vain.'

In order to accommodate Hornibrook's collection a considerable extension was added to the Rock Garden at Glasnevin.

In 1923 Hornibrook and his family departed from Ireland. When Hornibrook left Knapton, the garden was plundered by gardening enthusiasts. The same year saw the publication by Country Life of the first edition of *Dwarf and slow-growing Conifers*.



The Hornibrooks took up residence in France. From there he sent to Glasnevin various alpine and bulbs collected on trips around the continent. Hornibrook was soon approached by a group of wealthy English gardening enthusiasts, who asked him to organise a garden which they had purchased in Essex. The idea was to propagate rare plants which could then be exchanged amongst other enthusiasts. No further information is available on the success or failure of this project.

From Ryde House, Ripley, Surrey, Hornibrook wrote an article for the *Gardeners' Chronicle* (Hornibrook, 1929) detailing information on several new dwarf conifers which had been discovered since his book was published, including the now famous *Chamaecyparis lawsoniana* 'Ellwoodii' a self-sown seedling found at Swanmore Park, Bishops Waltham, by the gardener Mr Ellwood. Two other well-known plants noted in this article were *Thuja plicata* 'Rogersii' and *Chamaecyparis lawsoniana* 'Minima Aurea'.

The Royal Horticultural Society held a famous Conifer Conference in 1931. Despite the fact he does not appear to have been a member of the Society, Hornibrook was invited to be a member of the Executive Committee charged with responsibility for convening this conference; it was mainly his work which laid the foundations on which the conference was based. He undertook the arduous task of preparing lists and contacting the owners of conifer collections which had been recorded for the 1891 Conifer Conference. As a result of his efforts 250 demesne owners sent particulars of their trees.

At the conference, Hornibrook took the opportunity to update the material in his book and in his paper he revised the nomenclature of forms in line with internationally agreed rules and made alterations to descriptions of forms where necessary; included also were short notes on new cultivars and a list of rare or especially good specimens and the gardens in which they grew (Hornibrook, 1931). Clearly at this time Hornibrook was revising and preparing for the publication of a second edition of his book but this did not appear until 1939. The first edition listed 460 cultivars; in the second edition there were over 500 taxa (Hornibrook, 1939).

Little is recorded about Hornibrook after his short residence in Ripley, Surrey. He returned to France, favouring the south as he suffered from sciatica. Undoubtedly he made short visits back to England. Once again the outbreak of war in 1939 forced Hornibrook to abandon his adopted home, this time France, and return to England.

Hornibrook's last known article appeared in the *Journal of the Royal Horticultural Society* in 1942. Again he took the opportunity to reiterate his opposition to importing continental impostor "dwarf conifers", and urged, as he consistently had throughout his previous writings, the desirability of propagating "dwarf" forms from cuttings at all times. To illustrate this point he refers in the article to his own collection donated to Glasnevin twenty years previously. From photographs he was shown in 1942 he was able to identify *Picea* plants fifteen feet high - these should only have been four feet tall after thirty years. Those plants had been purchased from German, Dutch and French nurseries when he resided at Knapton.

Unfortunately, I could not discover more information about Murray Hornibrook except that he died a few years later. Enquiries so far have failed to unearth a birth or death certificate.

From my research into the life and work of Murray Hornibrook I have drawn some conclusions. It appears that he may have fallen on hard times in England and through family connections he achieved an appointment as Resident Magistrate in Ireland. In Ireland he seemed to avoid socialising with his class and participation in the various social activities of Queen's County. A perusal of the local paper, *The Leinster Express*, for that period yielded only reports about his work as RM, presiding over the Abbeylisk Petty Sessions - obviously a man who kept busy with his plant collection and their propagation. His position as an Irish RM would have entitled him to a pension from the Crown, and this perhaps allowed him to continue his researches on leaving Ireland. The income from his pension would have been supplemented by whatever royalties he received after the publication of his book, but Hornibrook did not become a wealthy man from his work with conifers.

Murray Hornibrook's efforts and hard work on behalf of dwarf conifers have been amply rewarded. The advent of the small suburban garden has brought increased demand for dwarf and slow-growing conifers; today no good garden centre is without its display of these evergreens.

Murray Hornibrook himself appears to have received no honours but he is remembered in *Juniperus communis* 'Hornibrookii' which he gathered in the west of Ireland, and in *Pinus nigra* 'Hornibrookiana'.

#### Acknowledgements

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## References

- Desmond, R.G.C. (1977). *Dictionary of British and Irish botanists and horticulturists*. Taylor and Francis Ltd., London.
- Hornibrook, M. (1923). *Dwarf and slow-growing Conifers*. Country Life Ltd., London.
- Hornibrook, M. (1929). Notes on some recently discovered dwarf conifers. *Gardeners' Chronicle*
- Hornibrook, M. (1931). Dwarf Conifers. *RHS Report of the Conifer Conference*.
- Hornibrook, M. (1939). *Dwarf and slow-growing Conifers*. Country Life, London (second edition).
- Hornibrook, M. (1942). The future of dwarf conifers in the rock garden. *Journal of the Royal Horticultural Society* 67, 81-83.
- Welch, H.J. (1966). *Dwarf conifers, a complete guide*. Faber and Faber, London.
- Welch, H.J. (1979). *Manual of dwarf conifers*. Thiophrastim/Garland, New York.

## APPENDIX I

M. Hornibrook's dwarf conifer collection - an alphabetic list of plants (with date of donation). Names are those recorded in the Gardens' Accession books.

- |   |  |
|---|--|
| <i>Abies balsamea</i> 'Hudsonica' (Oct 1922)                      | <i>Juniperus horizontalis</i> 'Glaucua' (Dec 1921)           |
| <i>Abies lasiocarpa</i> 'Arizonica' (Oct 1922)                    | <i>Juniperus hudsonica</i> (Oct 1919)                        |
| <i>Abies lomeana</i> (Mar 1919)                                   | <i>Juniperus procumbens</i> (?sieb) (Dec 1921)               |
| <i>Abies pectinata</i> 'Prostrata' (Oct 1922)                     | <i>Juniperus sabina</i> 'Humilis' (Oct 1919)                 |
| <i>Abies subalpina</i> 'Beisneri' (Oct 1919, 1922)                | <i>Juniperus virginiana</i> 'Schottii' (Oct 1922)            |
| <i>Cedrus brevifolia</i> (Oct 1922)                               | <i>Picea alba</i> 'Echinaeformis' (Oct 1922)                 |
| <i>Cedrus libani</i> 'Comte de Dijon' (Oct 1919)                  | <i>Picea alba</i> 'Nana' (Dec 1921, Oct 1922)                |
| <i>Cephalotaxus pedunculata</i> 'Prostrata' (Mar 1921)            | <i>Picea albertiana</i> 'Conica' (Dec 1921, Oct 1922)        |
| <i>Cryptomeria</i> 'Monstrosa' (Oct 1919)                         | <i>Picea excelsa</i> 'Barryi' (Oct 1922)                     |
| <i>Cryptomeria</i> 'Nana Albasapica' (Oct 1919)                   | <i>Picea excelsa</i> 'Capitata' (Dec 1921, Oct 1922)         |
| <i>Cryptomeria japonica</i> 'Elegans Nana' (Dec 1921)             | <i>Picea excelsa</i> 'Cianbrassiliana Stricta' (Oct 1922)    |
| <i>Cryptomeria japonica</i> 'Globosa Nana' (Oct 1922)             | <i>Picea excelsa</i> 'Cianbrassiliana Elegans' (Oct 1922)    |
| <i>Cryptomeria japonica</i> 'Spiralifer Falcata' (Oct 1919, 1922) | <i>Picea excelsa</i> 'Conica Elegans' (Mar 1921)             |
| <i>Cryptomeria japonica</i> 'Viminalis' (Dec 1921)                | <i>Picea excelsa</i> 'Decumbens' (Oct 1922)                  |
| <i>Cupressus lawsoniana</i> 'Argentea Nana' (Mar 1919, 1922)      | <i>Picea excelsa</i> 'Dumosa' (Apr 1919)                     |
| <i>Cupressus lawsoniana</i> 'Forsteckiana' (Mar 1921)             | <i>Picea excelsa</i> 'Fardonensis' "- a form" (Oct 1922)     |
| <i>Cupressus lawsoniana</i> 'Globosa Nana' (Oct 1922)             | <i>Picea excelsa</i> 'Globosa Nana' (Oct 1922)               |
| <i>Cupressus lawsoniana</i> 'Juniperoides' (Mar 1921)             | <i>Picea excelsa</i> 'Gregoriana' (Apr 1919)                 |
| <i>Cupressus lawsoniana</i> 'Knowlfieldensis Glaucua' (Mar 1921)  | <i>Picea excelsa</i> 'Gregoriana' "Veitch's form" (Oct 1922) |
| <i>Cupressus lawsoniana</i> 'Lycopodioides' (Oct 1919, 1922)      | <i>Picea excelsa</i> 'Knapptonensis' (MH) (Oct 1922)         |
| <i>Cupressus lawsoniana</i> 'Minima' (Dec 1921)                   | <i>Picea excelsa</i> 'Maxwellii' (Apr 1919)                  |
| <i>Cupressus lawsoniana</i> 'Nana' (Mar & Oct 1919, Oct 1922)     | <i>Picea excelsa</i> 'Microsperma' (Apr 1919)                |
| <i>Cupressus lawsoniana</i> 'Tamariscifolia' (Mar 1919, 1921)     | <i>Picea excelsa</i> 'Nana' (Oct 1922)                       |
| <i>Cupressus obtusa</i> 'Nana' (Mar 1921)                         | <i>Picea excelsa</i> 'Nidiformis' (Dec 1921)                 |
| <i>Cupressus obtusa</i> 'Nana Crippsii' (Mar 1921)                | <i>Picea excelsa</i> 'Nidiformis' "Form B" (Dec 1921)        |
| <i>Cupressus obtusa</i> 'Nana Prostrata' (Mar 1921)               | <i>Picea excelsa</i> 'Ohlendorffii' (Mar 1921)               |
| <i>Cupressus obtusa</i> 'Pygmaea' (Oct 1922)                      | <i>Picea excelsa</i> 'Pachyphylla' (Dec 1921)                |
| <i>Cupressus obtusa</i> 'Tetragona Nana' (Dec 1921)               | <i>Picea excelsa</i> 'Parviflorus' (Mar 1919)                |
| <i>Cupressus pisifera</i> 'Filifera Aurea' (Oct 1919, 1922)       | <i>Picea excelsa</i> 'Prostrata' (Oct 1922)                  |
| <i>Cupressus pisifera</i> 'Intermedia' (Oct 1922)                 | <i>Picea excelsa</i> 'Pseudo-Maxwellii' (Mar 1921, Oct 1922) |
| <i>Cupressus pisifera</i> 'Plumosa Pygmaea' (Oct 1922)            | <i>Picea excelsa</i> 'Pumila' (Mar 1921)                     |
| <i>Cupressus pisifera</i> 'Squarrosa Nana' (Dec 1921, Oct 1922)   | <i>Picea excelsa</i> 'Pumila Argentea' (Apr 1919)            |
| <i>Cupressus pisifera</i> 'Squarrosa Pygmaea Aurea' (Dec 1921)    | <i>Picea excelsa</i> 'Pumila Glaucua' (Dec 1921)             |
| <i>Juniperus</i> (Canadian form) (Mar 1921)                       | <i>Picea excelsa</i> 'Pygmaea' (Oct 1922)                    |
| <i>Juniperus alpina</i> 'Aurea' (Dec 1921)                        | <i>Picea excelsa</i> 'Reflexa' (Dec 1921)                    |
| <i>Juniperus alpina</i> 'Prostrata' (Dec 1921)                    | <i>Picea excelsa</i> 'Remonti' (Apr 1919)                    |
| <i>Juniperus chinensis</i> 'Globosa' (Dec 1921, Oct 1922)         | <i>Picea excelsa</i> 'Repens' (Oct 1922)                     |
| <i>Juniperus chinensis</i> 'Globosa Aurea' (Oct 1922)             | <i>Picea excelsa</i> 'Repens' (Mar 1921, Dec 1921)           |
| <i>Juniperus chinensis</i> 'Plumosa Aurea' (Mar 1921)             | <i>Picea excelsa</i> 'Tabulaeformis' (Oct 1922)              |
| <i>Juniperus chinensis</i> 'Sargentii' (Mar 1921)                 | <i>Picea excelsa</i> var. (Oct 1919)                         |
| <i>Juniperus communis</i> 'Compressa' (Oct 1919)                  | <i>Picea glehnii</i> (Oct 1922)                              |
| <i>Juniperus communis</i> 'Nana' (Mar 1921)                       | <i>Picea nigra</i> 'Inverta Aurea' (Oct 1922)                |
| <i>Juniperus communis</i> 'Nana Aurea' (Oct 1922)                 | <i>Picea orientalis</i> 'Gracilis Nana' (Apr 1919)           |



*Picea pungens* 'Prostrata' (Oct 1922)  
*Pinus densiflora* 'Procumbens' (Apr 1919)  
*Pinus densiflora* 'Tanyosha' (Oct 1922)  
*Pinus laricio* 'Pygmaea' (Oct 1922)  
*Pinus laricio* 'Pygmaea Aurea' (Mar 1921)  
*Pinus montana* 'Pumilio' (Dec 1921)  
*Pinus peuce* 'Compacta' (Oct 1922)  
*Pinus strobus* 'Nana Aurea' (Oct 1919)  
*Pinus strobus* 'Umbraculifera' (Oct 1922)  
*Pinus sylvestris* 'Baeuvoronensis' (Oct 1919)  
*Pinus sylvestris* 'Genevensis' (Dec 1921)  
*Pinus sylvestris* 'Nana' (Oct 1922)  
*Pinus sylvestris* 'Pygmaea' (Dec 1921)  
*Pinus sylvestris* 'Viridis' (Oct 1919)  
*Pinus sylvestris* 'Watermani Compacta' (Oct 1919)  
*Pseudotsuga douglasii* (Mar 1919)  
*Pseudotsuga glauca* 'Nana' (Oct 1922)  
*Taxus baccata* 'Fastigiata Gracilis Pen: Nana' (Mar 1919)  
*Taxus baccata* (narrow fastigiate form) (Dec 1921)  
*Taxus baccata* 'Pygmaea' (Dec 1921)  
*Taxus cuspidata* 'Capitata' (Oct 1922)

*Taxus cuspidata* 'Densa' (Oct 1922)  
*Taxus cuspidata* 'Nana' (Dec 1921)  
*Thuja occidentalis* (Apr 1919)  
*Thuja occidentalis* "Arnold Arboretum dwarf" (Oct 1922)  
*Thuja occidentalis* 'Cristata' (Mar 1921)  
*Thuja occidentalis* 'Ericoides' (Dec 1921)  
*Thuja occidentalis* 'Globosa' (Dec 1921)  
*Thuja occidentalis* 'Globosa' "Arnold Arboretum" (Dec 1921)  
*Thuja occidentalis* 'Little Gem' (Mar 1921)  
*Thuja occidentalis* 'Pygmaea' (Mar 1921)  
*Thuja occidentalis* 'Umbraculifera' (Oct 1919)  
*Thuja orientalis* 'Filifolia Stricta' (Oct 1922)  
*Thuja orientalis* 'Juniperoides' (Oct 1922)  
*Thuja orientalis* 'Rosedalis Compacta' (Oct 1919)  
*Thuja plicata* 'Hillieri' (Oct 1922)  
*Thuja plicata* 'Hillieri Nana' (Dec 1921)  
*Tsuga brunoniana* (Oct 1922)  
*Tsuga canadensis* 'Minima' (Oct 1919)  
*Tsuga canadensis* 'Parvifolia Nana' (Oct 1922)  
*Tsuga jeffreyi* "MH" (Oct 1922)

## APPENDIX II

This listing of Hornibrook's original donations and or propagations from the originals was compiled between October 1988 and February 1989. The areas containing the main dwarf conifer collection are the nursery, rockery and alpine yard. (Accession numbers are quoted when available).

- Abies balsamea* 'Hudsonica' [i.e. *A. balsamea* f. *hudsonia*]  
 A young plant in the nursery (1922.004888).  
*Cedrus brevifolia*  
 A large plant on Pine Hill but without Hornibrook's name on the label (1922.000323).  
*Cedrus libani* 'Comte de Dijon'  
 The original (type) plant is still on the rockery (1919.005619); young plant in the nursery (1919.004905).  
*Cephalotaxus pedunculata* 'Prostrata'  
 Plants in the nursery (renamed *C. harringtonia*) (1921.005247); in the rockery there is a sizeable plant without a source which may be the original donation (as *C. drupacea* 'Prostrata': XX.005375).  
*Cryptomeria japonica* 'Elegans Nana'  
 A plant in the nursery (1921.005374).  
*Cryptomeria japonica* 'Globosa Nana'  
 A plant in the nursery but without a source (XX.005375).  
*Cryptomeria japonica* 'Knapptonensis'  
 A plant in the nursery (1922.005225) is attributed to Hornibrook.  
*Cryptomeria japonica* 'Spiralifer Falcata'  
 Plants in the nursery now labelled *C. japonica* 'Spiralis' (XX.000320) but they are not attributed to Hornibrook.  
*Cryptomeria japonica* 'Viminalis'  
 Original plant still on the rockery (1921.000256), of spreading habit and in good condition considering its age; young plants in the nursery.  
*Cupressus* [i.e. *Chamaecyparis*] *lawsoniana* 'Forsteckiana' [i.e. 'Forsteckensis']  
 Plants in the nursery (1921.004930) and a large plant on the rockery, without a source which could be the original (XX.004255).  
*Cupressus* [i.e. *Chamaecyparis*] *lawsoniana* 'Globosa'  
 A plant attributed to Hornibrook (1922.004935) is in the nursery.  
*Cupressus* [i.e. *Chamaecyparis*] *lawsoniana* 'Globosa Nana'  
 Original plant on the rockery (1922.004936) and a young plant in the nursery (1922.005256).



- Cupressus* [i.e. *Chamaecyparis*] *lawsoniana* 'Knowlfieldensis Glauca'  
The original plant died recently and has been removed from the rockery; young plants (now named *Chamaecyparis lawsoniana* 'Knowlfieldensis') are in the nursery (1921.000254).
- Cupressus* [i.e. *Chamaecyparis*] *lawsoniana* 'Lycopodioides'  
A plant on Pine Hill (1919.006765) may be the original; young plant in the nursery (1921.004945).
- Cupressus* [i.e. *Chamaecyparis*] *lawsoniana* 'Minima'  
One plant in the nursery (1922.005297) and one in the rockery (1921.000230).
- Cupressus* [i.e. *Chamaecyparis*] *lawsoniana* 'Nana'  
I believe the plant on the rockery (Pine Hill) is the original (1922.000248); another bears the number XX.000293 but has no history attached.
- Cupressus* [i.e. *Chamaecyparis*] *lawsoniana* 'Tamariscifolia'  
A young plant in the nursery (1921.004962).
- Cupressus* [i.e. *Chamaecyparis*] *obtusata* 'Nana'  
Two plants in the nursery (1921.004974; 1921.005264).
- Cupressus* [i.e. *Chamaecyparis*] *obtusata* 'Nana Crippsii'  
There is a plant labelled *C. obtusata* 'Crippsii Nana' in the nursery but it has no source on it (XX.004977).
- Cupressus* [i.e. *Chamaecyparis*] *pisifera* 'Filifera Aurea'  
There is one plant in the nursery (1921.004995).
- Cupressus* [i.e. *Chamaecyparis*] *pisifera* 'Nana'  
A plant (1921.005296) in the nursery is attributed to Hornibrook [could it perhaps be *C. pisifera* 'Squarrosa Nana'?).
- Cupressus* [i.e. *Chamaecyparis*] *pisifera* 'Plumosa Pygmaea'  
A plant with this name in the nursery has no source (XX.005341).
- Juniperus chinensis* 'Globosa Aurea'  
A young plant in the nursery now named *J. x media* 'Plumosa Aurea', but without a source (XX.005390).
- Juniperus chinensis* 'Plumosa Aurea'  
A plant in the nursery, without a source is labelled *J. x media* 'Plumosa Aurea' (XX.005402).
- Juniperus chinensis* 'Sargentii'  
A plant in the nursery (1921.004906) is now labelled *J. chinensis* var. *sargentii*.
- Juniperus communis* 'Nana Aurea'  
A plant in the nursery, but without a source (XX.005411).
- Juniperus communis* 'Compressa'  
There is a plant with this name in the Mill Field but with no source information (XX.009559).
- Juniperus horizontalis* 'Glauca'  
A plant in the nursery (XX.005425).
- Juniperus procumbens*  
One plant in the nursery but without a source (XX.005424).
- Picea excelsa* [i.e. *P. abies*] 'Barryi'  
There is a plant (1.5 m tall) near the Dry Stone Wall (Pond area), but it has no source (XX.009558) and it may be the original.
- Picea excelsa* [i.e. *P. abies*] 'Capitata'  
There is a plant on the rockery which must be the original but no history is on the label (1921.005680); plants also in the nursery.
- Picea excelsa* [i.e. *P. abies*] 'Clanbrassiliana'  
A plant on the rockery (1921.0-04544) has Hornibrook's name but there is no second cultivar epithet on it (cf. Appendix I - both donated plants bore two epithets).
- Picea excelsa* [i.e. *P. abies*] 'Clanbrassiliana Elegans'  
A plant in the nursery but no information attached (XX.005456).
- Picea excelsa* [i.e. *P. abies*] 'Clanbrassiliana Stricta'  
A plant in the nursery without source information (XX.005457).
- Picea excelsa* [i.e. *P. abies*] 'Decumbens'  
The original plant is still on the rockery (1922.000312).
- Picea excelsa* [i.e. *P. abies*] 'Dumosa'  
A young plant in the nursery (1922.005458).
- Picea excelsa* [i.e. *P. abies*] 'Globosa Nana'  
A plant in the nursery, grown under this name, has no source information (XX.005461).
- Picea excelsa* [i.e. *P. abies*] 'Nidiformis'  
Plants in nursery (1921.000290), and one on Pine Hill which may be the original.



*Picea excelsa* [i.e. *P. abies*] 'Ohlendorffii'

The original plant is on the rockery (1921.000310), and young plants in the nursery may be propagations from it (XX.000370).

*Picea excelsa* [i.e. *P. abies*] 'Pseudo-Maxwellii'

Original plant on the rockery; plants also in nursery.

*Picea excelsa* [i.e. *P. abies*] 'Pumila'

A plant in the nursery without a source (XX.005467).

*Picea excelsa* [i.e. *P. abies*] 'Pumila Glauca'

Plants in the nursery, and one, without any history, in the rockery (XX.005706).

*Picea excelsa* [i.e. *P. abies*] 'Pygmaea'

There is a plant in the nursery, and one (recently planted) in the alpine yard, both with Hornibrook's name on the label.

*Picea excelsa* [i.e. *P. abies*] 'Repens'

Plants in the nursery, and also one on Pine Hill (XX.009335) without a source.

*Picea excelsa* [i.e. *P. abies*] 'Tabulaeformis'

A young plant in the nursery.

*Picea albertiana* 'Conica' [i.e. *P. abies* 'Albertiana Conica']

A plant on the rockery with this name does not bear Hornibrook's name, but judging from its size today it could be the original Hornibrook plant (XX.005630).

*Pinus montana* 'Pumilio' [i.e. *P. mugo* var. *Pumilio*]

The original plant on the rockery is in very poor condition (1921.000243).

*Taxus cuspidata* 'Densa'

A plant on the rockery under this name (XX.000235) has no source on the label.

*Thuja occidentalis* 'Ericoides'

Plants in the nursery (1922.005232).

*Thuja occidentalis* 'Pygmaea'

A plant under this name in the nursery (XX.005524) has no source attached.

*Thuja orientalis* 'Juniperoides'

A plant in the nursery (XX.005234) has no source attached.

*Thuja orientalis* 'Rosedalis Compacta'

There is a plant, without a source, in the nursery.

*Thuja plicata* 'Hillieri'

The original plant is on the rockery (1922.005314), and there are other plants on Pine Hill (1921.000237, 1922.000249, XX.000246 [without source]).

*Thuja plicata* 'Hillieri Nana'

There are plants in the nursery.



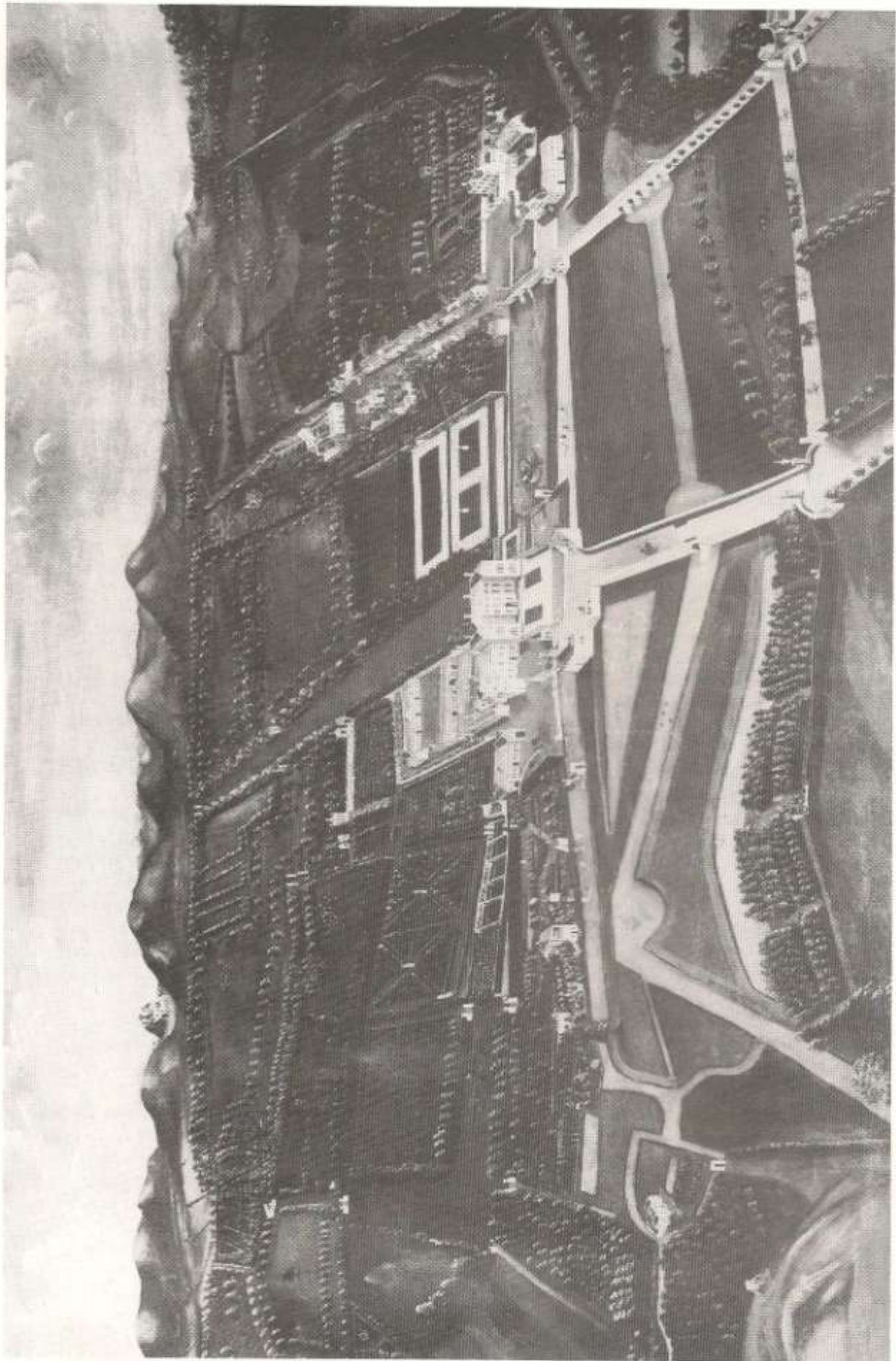


Figure 1. View of Stradbally (artist unknown).



AN EIGHTEENTH-CENTURY VIEW OF STRADBALLY HALL  
AND ITS ENVIRONS

An eighteenth-century painting of Stradbally Hall (Co. Laois) showing an extensive formal landscape prompts the question as to whether such a series of gardens ever existed there. The purpose of this paper is to show that apparently it did, at least in some form.

The Cosby connection with Stradbally goes back to 1592 when Francis Cosby was granted 1,380 acres (575 ha) there by Queen Elizabeth I.<sup>1</sup> Using material from a castle which had been owned by a local Irish clan O'More he built a fortified house. After various vicissitudes in the mid-seventeenth century, the Cosby family seemed to have been firmly in possession of the land at the time of Colonel Dudley Cosby (1672-1729) and his son Pole Cosby (1703-1766).

In his autobiography<sup>2</sup> Pole Cosby describes the improvements undertaken by his father Colonel Dudley Cosby and later by himself. As a young man he studied at the University of Leyden in Holland and visited Germany. He mentions that he visited some fine gardens and houses and it is evident from the painting (Figure 1) that he must have been influenced by the Dutch style.

In 1714 Colonel Dudley Cosby constructed the avenue and bridge leading to the house, which had been built in 1699.<sup>3</sup> He walled the garden to the north-east, laid out the parterre, formed a new kitchen garden which was planted with the 'choicest of fruits' and added an orchard on the north-west side of the house. Also in 1714 the bridge of five arches was constructed over the Bauteogue River. From 1718 to 1723 he planted hedges, constructed ditches and laid out walks through the woods.

In 1724, Pole Cosby obtained permission from his father to improve an area known as Coinglass which he renamed Mountpleasant. Evergreens and trees were planted and people came to see what was described as 'a kind of improvement new in the county'.

In 1725 the canal aligned diagonally to the avenue bridge was constructed. Cosby made and planted an Island Hermitage and planted a grove, together with firs and elms and a yew circular seat, none of which is identifiable on the painting. In 1735 he laid out a 'bowlin alley'. He received twenty pounds (Irish) from the Lent Assizes of 1733 to improve the bridge with two arches over the mill course and the bridge of five arches over the Bauteogue river. Later in 1735 he built four pillars, two at either end of the development.

In another development, the date of which is unclear, Cosby took over the fort, probably the main residence, from his brother-in-law. He made the fosse deeper, built a new drawbridge, removed large fruit trees, laid out a garden and planted two English elm hedges, 200 yew and 200 beech on the Rampart. In February 1738 Pole Cosby notes tree planting in various parts of the estate. A total of 2725 spruce and 1505 'scotch' were planted in various areas (see Table 1). He also records donations of trees to his neighbours (see Table 2). A list of woody plants cultivated on the estate is given in Table 3.

Pole Cosby lived until 1776, but after 1738 his autobiography makes no other reference to the garden or horticultural matters on the estate. Bishop Pococke visited Stradbally in 1752, however, and speaks of 'Mr. Cosby's seat with the finest improvement of high hedges, of whitethorn, hornbeam, etc. I saw around the quarters, which are full of kitchen stuff and excellent fruits'.<sup>4</sup>

The late seventeenth-century house was burnt down and a new house was built in 1772 by Lord Sidney of Cosby, Pole Cosby's son. The present house was built by Sidney Cosby in 1840. The history of the garden during these changes is obscure.

The perspective view of Stradbally, dated c. 1740 by an unknown artist, portrays a large house surrounded by an extensive formal landscape, a smaller house with adjoining gardens and a village street. The painting, oil on canvas, measures 62½" x 96".<sup>5</sup> The formal landscape is compartmentalised and includes many features on either side of a central vista: (a) formal rectangular pool and canals developed from the Bauteogue River; (b) a parterre with diagonal paths and a statue at the centre of each compartment; (c) formal avenues of young trees; (d) five walled gardens lined with cultivated fruit; (e) a formal avenue gravelled with coloured stone and ornamented with flower pots (in this area also there are five garden buildings); (f) numerous garden buildings, including one in classical style. Scattered throughout the painting there are numerous tall ornate gates all painted a similar tan colour (similar perspective drawings by Kip and Kniff of Longleat and Chatsworth dating from 1700 show similar large gate posts).

The painting displays many of the garden features encountered by Celia Fiennes in her journeys through England in the late 17th and early 18th century, 'much wall fruit', 'pots of flowers and green' and



Table 1. Donations of trees from Stradbally Hall, February 1738.

Recipient	Name of tree	Number of trees
Col. Hum. Bland	spruce	90
Cousin Wheler Barrington	spruce	512
Lewis Moore Esq.	spruce	12
Michael Broomhill (tenant at Grange)	spruce	60
	Scots pine	162

Table 2. Trees planted by Cosby in 1738.

Location	Scots pine	spruce
Quarry at Knockcarroll	185	10
Upper Wood Wall	264	
Clump, at Braitweit	69	
Sarah's Grove	932	1915
Star	55	
Hop Pole plantation		800
Total	1505	2725

Table 3. Trees and shrubs cultivated at Stradbally Hall in the 18th century.

Common Name	Scientific Name
Spruce Fir [spruce]	<i>Picea abies</i>
Scotch [Scots pine]	<i>Pinus sylvestris</i>
Hassel [hazel]	<i>Corylus avellana</i>
English Elm	<i>Ulmus procera</i>
Elm [Wych elm]	<i>Ulmus glabra</i>
Yew	<i>Taxus baccata</i>
Ash	<i>Fraxinus excelsior</i>
Crabquick [hawthorn]	<i>Crataegus monogyna</i>
Oak	<i>Quercus robur</i>
Beech	<i>Fagus sylvatica</i>
Fir [silver fir]	<i>Abies alba</i>



'gravell and grass walks'.<sup>6</sup> A bird's-eye painting 'A Prospect of the House of Howth' dated c. 1740 exhibits similar garden features, though on a less extensive scale. Statuary, parterres and formal avenues of trees are common to both paintings. A formal canal terminates the central vista of the garden at Howth (Co. Dublin) which by the end of the eighteenth century had altered greatly.<sup>7</sup>

The smaller house to the right of the Stradbally painting was built about 1714 by a clothing manufacturer, Israel Mitchell. It is shown with more modest outbuildings with fruit trees cultivated against the walls and a formal garden. This building cannot be distinguished on the 6 inch Ordnance survey maps of 1830 and 1906 but it does appear to have survived.<sup>8</sup>

The painting also shows the village of Stradbally with a wide main street with a row of thatched and some tiled houses on either side. The market house, which is clearly visible in the painting stood until 1821. A small thatched Roman Catholic Church built in 1721 is not discernible on the painting. The present Church of Ireland, St. Patrick's Church, stands on the site of the smaller church shown in the right hand corner of the painting.

One wonders how much of this large extensive painting was ever a reality and how much of the detail was due to the artist's own imagination. It is still possible to see the original avenue leading from the church to the main gates and the avenue then leading to the main house. The extensive canal system is also still discernible, although the mill race has been diverted and now follows the line of the Bauteogue River. All that remains of the original garden is a long wall running from an area adjoining the site of the original house to beyond the stable buildings. The formal avenue behind the house (leading to the fort of Dunamase) is unlikely to have been as long as it is portrayed nor indeed is the Rock of Dunamase visible from the town of Stradbally. None of the garden buildings exists today and little remains of the formal avenues of trees.

It is difficult to identify any of the building units on the main street of Stradbally shown on the painting with the present structures, although the line of buildings has not changed greatly since this painting of the 1740s. The large pillars mentioned by Cosby on the bridges are, in fact, of no great size and on the bridges standing today there is one arch instead of two arches, and three arches where the painting shows five arches. The wide main street has been extended on the south side of the town towards St. Patrick's Church. The Roman Catholic Church, the Presentation Convent and the mills of Minch Norton now stand on either side of the millrace and Bauteogue River.

## References

1. O'Hanlon, J. and O'Leary, E. (1907). *History of the Queens County*. Sealy, Bryers and Walker, Dublin.
2. Cosby, P. (1906). An Autobiography. *Journal of the Kildare Archaeological Society* 5: 79-99, 165-184, 253-273, 311-324, 423-436.
3. Malins, E. and Glin, Knight of (1976). *Lost Demesnes. Irish Landscape Gardening 1660-1845*. Barrie and Jenkins, London.
4. Pococke, R. (1891). *Pococke's tour in Ireland in 1752* (edited by S.T. Stokes). Hodges Figgis, Dublin.
5. Crookshank, A. et al. (1965). *Irish Houses and Landscapes Exhibition*. (Catalogue) Dublin and Belfast.
6. Fiennes, C. (1982). *The illustrated journeys of Celia Fiennes*. MacDonald & Co., London.
7. Ball, F. (1917). Howth and its owners. *A History of the County Dublin*, Vol. 5. Gill and MacMillan, Dublin.
8. Ordnance Survey - Queen's County (Sheets 14 and 19); 6 inches to one mile. 1836, 1906.



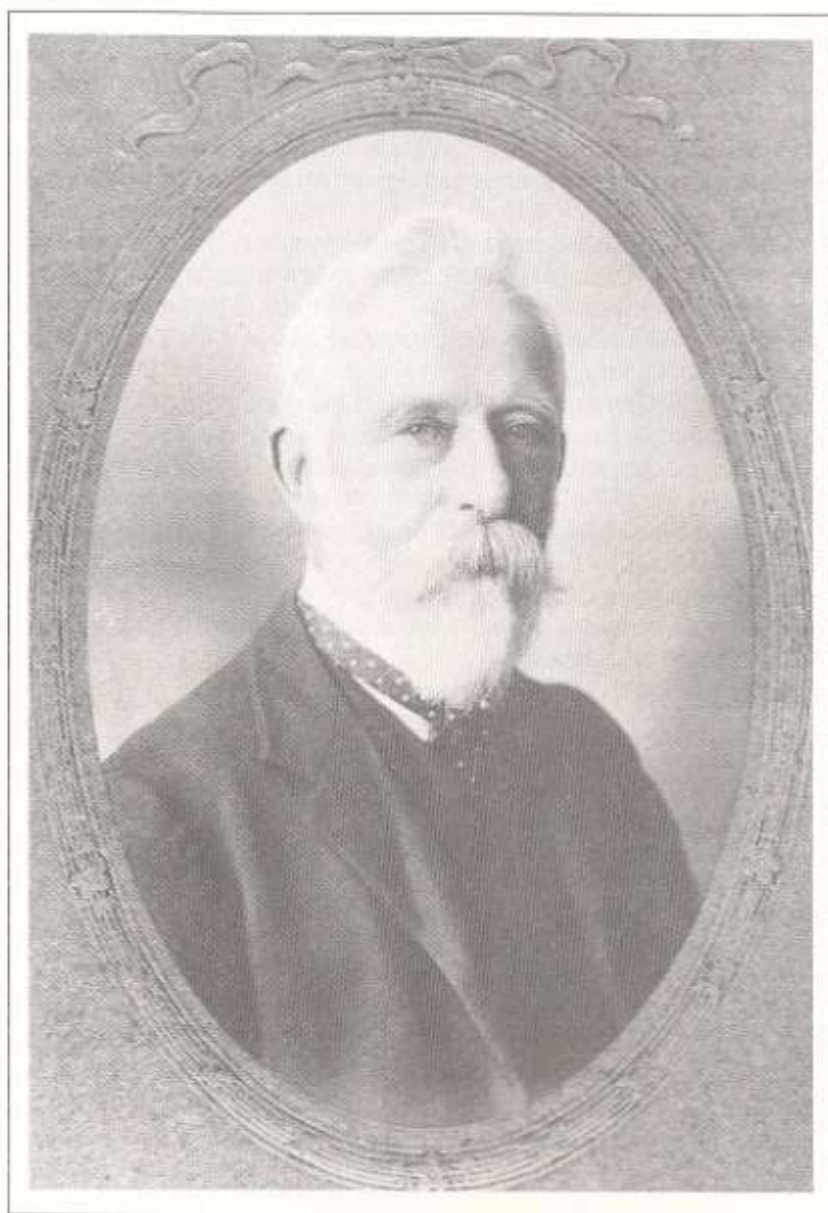


Figure 1. J. W. Keit (courtesy of Owen Keit, and Dr L. E. Codd), originally reproduced in Nelson and McCracken (1987: 136).



## JULIUS WILHELM KEIT, A GERMAN HORTICULTURIST AT THE BOTANIC GARDENS, GLASNEVIN

Wilhelm Keit was employed at Glasnevin Botanic Gardens from 1868 until 1872. He was probably the first foreigner to be on the staff and he was the first employee to become curator of another botanic garden. Keit was a prolific letter-writer and fortunately many of his letters to his family have been preserved.

In April 1866 Julius Wilhelm Keit wrote to his uncle and guardian, Hermann Stainmetz, who lived in Leipzig, 'I am now twenty five years old - I am tired of working for other people and would like to be on my own.' Just under seven years hence his ambition would be fulfilled with his appointment to the Curatorship of Durban Botanic Gardens which had been established in 1851, ten years after Keit's birth.

Keit, the son of a master soapmaker, was born in Dresden in Saxony on 1 May 1841. In addition to himself there were two sisters (one called Clara) and a step-brother, Heinrich Hoehne, in the family. His father died when he was seventeen and the money left him was managed, with great skill and honesty, by his guardian until it was transferred to Keit in Durban many years later.

Keit's first employment was in the gardens in Wessenstein, but in the early spring of 1860 he left the job with pleasure and lightheartedness. While in Wessenstein he asked his uncle for money to buy a cape and a rain coat because he did not like going to parties in his winter coat and carrying an umbrella. His guardian turned down his request, explaining that he would not like one of the family to join 'the à la mode crowd' which he found laughable. Later in the year, in October, Keit asked his aunt to send him his fur gloves and 'fist gloves'.

By March 1860 Keit was in Nuremberg, having travelled via Bamberg - partly on foot - to take up a position as supervisor of the hot-houses. Here the head gardener was constantly drunk and there was such quarrelling that in three years thirty employees had come and gone. Keit's salary was so low that he had to write to his guardian for money to buy clothes. He was lonely in Nuremberg but he liked the work and remained there until July 1861 when he had to go to Bautzen to find out whether or not he would be required for military service. He was not conscripted, so in February 1862 he took up a position in a Basle garden where he remained until February 1864 when he moved to Paris.

At Basle, where there was already a staff of two gardeners and two apprentices, he found the food unusual but he liked the work. At six in the morning they had black bread and coffee, and during a half hour break at 10 a.m., bread and wine. The noonday lunch was of soup, vegetables and meat and the evening meal at 6 p.m. was of bread and wine. On alternate days there was also either soup with sliced cheese or coffee and roast potatoes. Every third day there were extra rations of 4lbs of bread and each day a bottle of wine. Work ceased at 8 p.m. and Keit then amused himself by playing his zither. While at Basle this family-conscious man came of age and wrote to thank his guardian for all that had been done for him and to assure him that he would continue to seek his advice.

Disappointment came late in 1863 to Keit when he failed to get employment with Hendersons, the London nursery firm. However, the following year with a good testimonial and 20 francs for travel-money he moved to Paris where he enjoyed sightseeing among the gardens and museums. By the autumn of 1864, he was employed in the Linden Nurseries in Brussels. Where he worked in Paris is not known.

Keit considered himself lucky to have got employment in the Linden Nurseries, for ten men were then applying for one post and many gardeners were offering to work for nothing. His salary (50 francs) was insufficient for him to give on or to pay for his light and heating. It was at the Linden Nurseries that he expressed the wish to be his own master.

When Monsieur Linden was in England in 1866 he got Keit a post in Dublin. Keit was engaged to look after the hot-houses, under the general supervision of Ninian Niven, in the Great Dublin Exhibition. He sailed from Antwerp on the steamer *Dolphin*, travelled by train across England to Holyhead and arrived in Dublin at 7 a.m. after a six-hour sea journey. He at once wrote to his guardian. He had, he said, a contract for a year and his salary was sufficient for him to live on. He offered to look after one of his sisters, if she would come to Dublin, to relieve his uncle of the burden. The weather was not good and he felt the change of climate badly. He was well but 'must adjust myself to the English habits and the meat eating.' Nevertheless, he was happy in Dublin even though it was 'the most dirty town I have ever seen'. The Irish Christmas, however, was to prove a disappointment for him: 'the people know nothing of a Christmas like ours, only here and there is there a Christmas tree.'



By the summer of 1867, when he had been in Dublin for a year, he was having doubts about the future prospects for the Exhibition, although the director, a Mr Brady, told him that he hoped he (Keit) would remain with them for many years and asked the Company to raise his salary. The Company shares, which two years previously were worth £5 each, had fallen in value to 17 shillings and the Company was on the verge of bankruptcy. Keit's forebodings were confirmed when in September the Company, with debts of £42,000, gave notice to all its employees; by the end of year it was in the hands of a liquidator.

Before the end of January 1868, through the good offices of Brady, Keit had a job with Lady Ellen Walker, owner of Blyth Hall near Worksop in Nottingham. The Blyth garden, which covered 5 acres, Keit found in a neglected state. After five months he resigned and returned to the continent to visit his relatives in Dresden. Then, on 1 June 1868, he took up a position as propagator in the Botanic Gardens at Glasnevin in Dublin.

His appointment brought the Royal Dublin Society, which controlled the Glasnevin Botanic Gardens, into conflict with the Board of Works. The Board of Works insisted that Keit and William Parnell, a Gardens' employee who had been upgraded to the post of outdoor foreman, should be examined by the Civil Service Commissioners to determine their fitness for the posts. After much discussion it was agreed that Keit should be tested in simple arithmetic, his ability to write, and his prowess in reading an easy passage in either German or English (Nelson and McCracken, 1987).

The Board of Works also insisted that both men should receive an extra 3 shillings a week on their wages but should then be deemed ineligible for a pension.

Keit's position at Glasnevin was that of propagator, one of the most important within the Gardens. He had overall responsibility for raising seeds that came to Dublin from botanists, plant-collectors and botanical gardens in many distant parts of the globe. He was also the gardener charged with ensuring success in a series of pioneering experiments which the Director, David Moore, initiated in the late 1860s, to raise the first artificial hybrid pitcher-plants (*Sarracenia*).

In a paper presented at the International Botanical Congress in Florence, June 1874, Moore (1874) acknowledged Wilhelm Keit's contribution:

The seed from which the hybrid plant [*Sarracenia x moorei*] was raised, ripened in 1868, under the care of M. Keit, who was then our propagator, and is now curator of the Botanic Garden at Natal, South Africa. In the following spring the seeds were sown by him, on finely sifted sandy heath mould, without any covering of mould put over them ... The young seedlings ... are very liable to damp off, even with the greatest care, and although M. Keit watched them constantly ... he lost a large portion of those that germinated.

For an exhibit of the hybrids, the Royal Tuscan Horticultural Society awarded Moore a gold medal; a second one was given for a specimen of the Madagascar lace-plant, a water-plant with lattice-like leaves (*Ouvirandra*) (Nelson & McCracken 1987). One of the hybrid *Sarracenia* was named after David Moore (*Sarracenia x moorei*) and a second, of different parentage, bears the name of William Pope, one of the foremen at Glasnevin (*Sarracenia x popei*) and contemporary of Keit.

Keit was somewhat unusual among Glasnevin's gardeners as he took a substantial interest in general botany. Another contemporary, William Parnell, had similar but unsustained interests, and David Orr and David McArdle also undertook botanical studies mainly on aspects of the native Irish flora. What makes Keit's studies interesting is that he was an active member of the Dublin Microscopical Club and often reported his findings at the Club's monthly meetings.

He bought himself a microscope at Christmas 1869 and spent some of his spare time making preparations of plants and plant tissues which he examined with this instrument. In the published *Proceedings of the Dublin Microscopical Club* it is noted that on 26 January 1871 David Moore displayed one of Keit's slides, of the stomatoblasts of *Plumatella* from the tank in the Botanic Gardens - *Plumatella* is a genus of fresh-water algae. The stomatoblast was described as 'a pretty moderate-power object' - that is, one that could be seen without very high magnification. At the June meeting Wilhelm Keit himself demonstrated a plant of *Hydrodictyon utriculatum* and commented on its cell structure. As his observations did not accord with those published by other botanists, Keit hoped to continue his study of *Hydrodictyon* and report again to the Club; he did not have a chance to do so. On 15 February 1872 Keit showed a fungus (*Speira toruloides*) which he had obtained in the Botanic Gardens on *Coccoloba macrophylla* (Polygonaceae) and also on the decaying pitchers of the tropical insectivore *Nepenthes hookeri*. He reported that this microscopic fungus usually grew on oak, and that his was the first record from Ireland. Wilhelm Keit's last recorded attendance at the Club meeting was on 27 June 1872 when he exhibited a new species of *Peziza* (another small fungus), again from Glasnevin.



He had prepared slides of the spores for viewing with the microscope and had drawn details of the fungus' structure. Again Keit hoped to continue research on this plant and to publish a paper on it but nothing was reported in later issues of the Club's Proceedings.

Among the few items that can be gleaned from the archives at the National Botanic Gardens about Wilhelm Keit's time there is a list of the library books which he borrowed. Between 3 June 1871 and his departure from Glasnevin, Keit read:

- |             |   |
|-------------|---|
| 3.vi.1871   | J. D. Hooker: <i>The Student's Flora of the British Islands</i> . |
| 10.vii.1871 | J. Sowerby: <i>English fungi</i> .                                |
|             | D. Vivian: <i>I funghi d'Italia</i> .                             |
| 24.ii.1872  | U. Mudd: <i>A manual of British lichens</i> .                     |
| 20.iii.1872 | <i>The Gardener's Chronicle</i> (1865).                           |
| 1.ix.1872   | W. H. Harvey and O. Sonder: <i>Flora Capensis</i> (3 vols).       |

These show the change in his interests from studying the microscopic native flora and other plants of interest, to the flora of southern Africa, his new destination.

Keit maintained contact with his German relatives. It was therefore a pleasant surprise for him when in August 1869 Dr David Moore asked him to accompany the two young Moore boys, David and Frederick, to a school in Hanover. It is possible that Keit again visited Germany during the early months of 1870, and his final visit was in 1872.

Sometime during the early 1870s Keit let it be known to the Director of the Royal Botanic Gardens, Kew, J. D. Hooker, that he would be prepared to move to a more senior position. On 19 April 1872 the post of curator at Durban Botanic Gardens became vacant on the death of Mark Johnston McKen. After advertisements in local Natal papers failed to attract a suitable applicant, the Society which controlled the Gardens sought Hooker's help as he had always shown the most active interest in the Gardens.

Hooker wrote to Moore asking his opinion as to the suitability of Keit for the post and Moore replied in a letter dated 27 August 1872. He outlined Keit's career and continued:

He is also an excellent practical gardener and very ingenious applying various methods for propagating plants, raising seedlings and growing difficult species to cultivate ... He possesses a very general knowledge on every branch of horticulture ... He speaks and writes English fluently, as well as French.

Of the man himself Moore wrote:

... his manner is much in his favour, being respectful but not cringing. I have never had a man whose moral conduct stood higher in every respect than his does. Besides, he is a shrewd sensible man, who would leave nothing undone that he could do to give satisfaction to his employer ... I believe him to be the ... kind of man who is suited for such a situation as that at Natal, where a large amount of botanical knowledge is not required ...

Hooker offered the post to Keit who wrote accepting it on 29 August 1872. He considered the salary - £150 a year - low in comparison with English salaries for comparable posts. What Keit did not know was that at that time curators of the South Africa botanical gardens were expected to augment their salaries and contribute to the cost of running the gardens by raising tree seedlings and plants for sale.

Keit assessed his own abilities: he could arrange plants botanically if he knew their names but could not undertake successfully a scientific description of a plant. He knew what type of plants were needed by European botanical institutions and would enjoy collecting them. This honest and industrious man deserved a better post than curator of the shambles that passed for the Botanic Gardens in Durban. Moore was of the opinion that Hooker had made a good appointment and lamented that it would be difficult to find a satisfactory replacement for Keit.

Keit left Dublin on 25 September to pay his last visit to his family in Dresden and to ask his guardian for an advance of money so that he would not arrive at his new destination penniless. He sailed from London on 25 October 1872, changed ship at Cape Town and after a nine-day journey along the southern coast of Africa docked at Durban on 14 December officially to start work on 1 January 1873.

Within a week of his arrival Keit wrote a short letter to Hooker and more detailed letters to Dr David Moore at Glasnevin and to William Thiselton-Dyer. To Moore he wrote (original spelling retained):



## NATAL BOTANIC GARDENS

Durban, January 10, 1873

We have arrived safely and well at Durban on the 14 Dec. 72. Our journey has been longer than I expected, but in the whole very pleasant. There was something the matter with the screw of the Steamer "Celt" when we arrived at the Cape of Good Hope and we had to wait at Cape Town for 10 days until the Steamer "Natal" arrived from Natal to take us finally to Durban. Until now we have had only monthly communication between the Cape and England but from the next month another steamer will ply between here and the cape so that we shall have News twice a month.

During our stay at the Cape I have made several short excursions, and have also made the acquaintance of Mr. [James] McGibbon, Curator of the botanic Gardens, a very good friend of the late Mr. McKen. It was there where I was informed for the first time that my predecessor had been married and left a wife with six young children altogether unprovided for. A subscription has been made among the friends in Durban and the Colonies which realised about £600 for the maintenance of the family.

Shortly after my arrival I have taken charge of the Gardens and possession of the house where I am living now. I have met with very kind people in Durban and the Hon. Secretary Mr K. Jameson has done his best to make me feel comfortably amongst them.

The area of the ground belonging to this Establishment is about 50 acres, situated downward the foot of the mountain. The shape is rhomboid. 30 acres are under cultivation that is to say where Trees, Shrubs, Bulbs, Palms, Cycads and Zamias etc etc etc are planted sometimes in rows, moretimes indiscriminately mixed together & the whole garden is intersected by strait paths from one end to the other and these crossed again by others downward so that every shower of rain carries a large amount of sand - the only soil in the garden - down the hill, tearing up the paths.

What is most inconvenient to me is, that the plants in the garden have neither labels nor numbers for reference, no herbarium is kept in the gardens, and there is no person here who knows the plants properly. A great many I do not know myself and I have therefore no other way as to dry specimens and send them abroad for identification.

Before I can begin to make introductions it will be necessary at first to make myself acquainted with the plants which are in the Gardens and which have been introduced previous and in the mean time I shall collect fresh seeds of plants which are likely to be usefull for exchange.

Mr McKen has been here for 20 years collecting seeds and plants and has send great numbers away to all parts of the world. He evitendly knew the country well and had good frinds to help him. I am affrait the surrounding districts are well nigh stripd of what was worthwile taking and If I ever can go I shall have to go very far before I may be able to find something good or rare. However I am full of hopes and I trust patience and persevirence will help me to succeed in my undertaking.

Two of our Zamias in the garden have ripened seeds, they are of those kinds which are never found with a stem, they bear about 25-30 fronds each from 6'-8 feet long and 18"-21 inches across. I shall send you a few seeds with the next opportunity. I think you may like some for your garden. Pandanus utilis are ripening seeds here to, but I suppose the are to common already, and not worth while sending.

The Collections of Palms and Conifers are rather small. I am certain a great many more can be grown successfully, those which are here are doing very well, we have some fine plants of Araucarias here some measure 10'-30' high and are well furnished.

I expected to see a large collection of Bulbs and succulents but there are only few here and there, some orchids and ferns are growing on trees and on the ground, but nothing like collections, a large space of the ground is occopied with tropical fruit trees as Bananas, Jambosas, Anonas, Garcinias, Mangiferas and others, useful for timber and other purposes. I saw today a fine Loranthus or Nerium oleander, there are a great many here and as I know you take great interest in this kind of plant I shall pay particular attention to them.

On Christmass day I thought very much about you all, what a pleasure it might have been to you to see our Bougainvillea bushes in flower, bushes of 12' high and 20' diam no leaf to be seen all one bloom, the roses are now in full force, grapes, peaches, pineapples and Bananas are



ripening their fruits. The Thermometer on Christmass-day stood about 87° in the shade, how differently from what I am used to feel this time of the year at home.

The book from Bar. Fr. v Müller you kindly sent to me before I left England will be of use to me as a Guide for introductions to this Colony. I thank you very much for it, as well as for your kind offer to write to the Barron on my behalf, as soon as I am a little in order in this garden I shall write to Australia myself.

You probably will remember that one of my eyes was much inflamed when I left Dublin, the inflammation came to both eyes when I was in Germany and has not left me yet, so much so that I am not yet able to do any work by candle light, a great loss of time just now when I should work with all members of my body.

Please remember me kindly to the Members of the Dublin Microsc. Club, to Dr DeRicci and to my friends at the Glasnevin Gardens.

With the most sincere wishes that my letter may find you and your family in perfect health and happiness.

I remain  
Dear Dr. Moore  
Yours faithfully and obliged  
William Keit

Thiselton-Dyer received a less personal and more astringent letter. As the plants in the Gardens were all unlabelled Keit asked Dyer's permission to send dried specimens to Kew for identification. There were, he wrote, piles of packets of seeds, undated, unidentified, without information as to their provenance and mostly destroyed by mice. He would have to make a new collection himself. Keit was in those early days unaware that he would never get the opportunity to go plant-hunting and seed-collecting as he would be tied to the Gardens to make the twice-daily meteorological readings.

Writing to Hooker in September Keit remarked that the white ants had eaten all the wooden labels he had put in place and if possible, if the money was forthcoming, he would like to replace them by cast iron labels such as were used at Glasnevin.

Keit was unaware, perhaps, of the plans Hooker had to appoint him to a better post in India or Australia. But by then, the latter part of 1873, Keit was 'head over heels in love' with the daughter of one of the oldest colonists in Natal, the influential and affluent William Currie, who subsequently became Mayor of Durban and who settled land on Keit and his bride.

Once established in Durban, Keit sent several consignments of plants to Glasnevin. Those recorded in the Botanic Gardens Accession Books are:

21.vii.1874	Large case with some splendid stems of tree ferns
11.iii.1878	bulbous roots
-.ii.1882	61 scarce bulbs and plants from Natal, unnamed
-.viii.1882	A fine tree fern.

The fate of most of these plants cannot now be charted, but it is known that among the bulbs received from Keit was a dwarf *Agapanthus* which at the time had no name, although Keit is said to have suggested that it should be named after David Moore. Some account of this plant, *Agapanthus mooreanus*, is given in *An Irish Flower Garden* (Nelson 1984). It was clearly well-known in Irish and British gardens by 1884 which suggests that it was among the 1878 consignment. The original was described by George Nicholson in his *Dictionary of Gardening* as having dark blue flowers, with short, narrow, upright leaves, and as being perfectly hardy. Sadly this plant was not propagated vegetatively - this is essential to maintain any named cultivar of *Agapanthus* as they interbreed easily and seedlings will not come true. In 1905, A. Worsley wrote from Isleworth to the editor of *The Gardeners' Chronicle* noting that 'Mooreanus is more inclined to be deciduous, and ... may be left undisturbed at the base of a south wall .... In such places it will flower in July ...'. He also recorded that he had two colour forms of *Agapanthus mooreanus*, and raised seedlings from them. He continued: 'Mooreanus will flower from seed in eighteen months, and shows great colour variety, many shades of blue, even pure white coming from one blue parent without any crossing.' *Agapanthus mooreanus* thus seems to have been as promiscuous as the other forms of *Agapanthus* and we must assume Keit's original dark blue form is now lost - perhaps it resembled the Slieve Donard cultivar 'Midnight Blue'?

Keit is also known to have sent plants to the Bavarian gardener Max Leichtlin, who, incidentally, had worked at Glasnevin (perhaps as an unpaid apprentice) in 1856 (Le Lièvre, 1988). Leichtlin received from Keit a variant of the beautiful climbing lily, *Littonia modesta* - its generic name commemorates a former Professor



of Botany in the Royal Dublin Society and the second 'director' of the Botanic Gardens at Glasnevin, Samuel Litton. The variant was named var. *keitii* by Leichtlin and it seems merely to have been a robust form of *Littonia modesta*.

Keit stayed in Durban Botanic Gardens until 1881 making great improvements to them. He resigned to run his own nursery and dairy and also to hold the position (at £120 a year) of Curator of Parks and Gardens in Durban.

To the end of his life he kept in touch with his German relatives. He was careful to retain his German citizenship and obtained it for at least two of his sons. It was a disappointment to him that lack of money prevented him having his children taught German. When shipping consignments of plants to Europe, all things being equal, he used a German shipping line. He died on 27 August 1916.

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#### SOURCES:

##### Manuscripts:

Minute books (Royal Dublin Society).

Accession Book (Plants donated to Gardens), entries for 21.vii.1874; 11.iii.1878; -ii.1882; -viii.1882. (National Botanic Gardens, Glasnevin).

Library loans book. (National Botanic Gardens, Glasnevin).

J.D. Hooker to D. Moore, 4. viii.1873. (Moore papers; xerox in National Botanic Gardens, Dublin. We are grateful to Major-General F.D. Moore for access to these papers and for permission to use materials in this paper.).

J.W. Keit family correspondence (listed fully in McCracken (1987a). We are grateful to Mrs K. Plekker, and The Librarian, Killie Campbell Africana Library, Durban, for access to this correspondence and for permission to use materials in this paper).

J.W. Keit to D. Moore, 10.i.1873. (Moore papers; xerox in National Botanic Gardens, Dublin).

D. Moore to J.D. Hooker, 27.viii.1872; 6.ix.1872; 17.ix.1872. (English letters 95: 336, 338, 339. Royal Botanic Gardens, Kew).

R.G. Strey to E.C. Nelson, 24.xi.1978; 30.x.1978.

##### Printed papers and books:

Dublin Microscopical Club, (1871-1872). [Reports of meetings held on] 20.x.1870; 22.vi.1871; 26.i.1871; 15.ii.1872; 27.vi.1872. *Proceedings of the Dublin Microscopical Club* 1: 36, 93, 112, 131, 152.

Gunn, M. and Codd, L.E. (1981). *Botanical exploration of southern Africa*, p. 205. Capetown.

James, D. (1974). Julius Wilhelm Keit, 2nd curator of Durban Botanical Gardens. *The Berea Pictorial* 1 (4): 12.

Leichtlin, M. (1886). *Littonia modesta* var. *keitii*. *Gartenflora* 35, plate 1237.

Le Lièvre, A. (1988). The plantsman of Baden, Maximilian Leichtlin, 1831-1910. *Hortus*.

McCracken, D.P. (1987a). William Keit and the Durban Botanic Garden. *Bothalia* 16: 71-75.

McCracken, D.P. (1987b). Durban Botanic Gardens, Natal, 1851-1913. *Garden History* 15: 64-73.

Moore, D. (1874). On a hybrid *Sarracenia* ... *Atti del Congresso Internazionale Botanico, Firenze*, 174-179. (See Nelson & McCracken (1987), p. 272, footnote 9:54).

Nelson, E.C. (1984). *An Irish Flower Garden*, pp. 83-84, 183. Kilkenny.

Nelson, E.C. and McCracken, E.M. (1987). *The Brightest Jewel, a history of the National Botanic Gardens, Glasnevin*, Dublin, pp. 135-137, 139, 142, 261 (footnote 9:31).

Nicholson, G. (1884). *The dictionary of gardening*, p. 36. London.

Schrire, B.D. (1983). Centenary of the Natal Herbarium, Durban, 1882-1982. *Bothalia* 14: 225.

Walsh, W.F., Ross, R.I. and Nelson, E.C. (1983). *An Irish Florilegium*, p. 76. London.

Walsh, W.F. and Nelson, E.C. (1988). *Littonia modesta*. *An Irish Florilegium II*, plate 24; p. 110. London.

Worsley, A. (1905). Notes from an Isleworth garden. *The Gardeners' Chronicle*, 37 (ser. 3) (18.iii.1905): 164.

<sup>1</sup>Tenth Avenue, Morningside, Durban, South Africa.

<sup>2</sup>National Botanic Gardens, Glasnevin, Dublin 9, Ireland.



NOTES ON IRISH CULTIVARS WITH SOME NEW NAMES

In the past year a number of new cultivar names have appeared in publications including nursery lists, but because descriptions or dates were omitted some of these names do not conform to the internationally agreed rule of nomenclature for cultivar plants; it is desirable that these names be validated by formal publication here. In the following paragraphs I have added notes about other new cultivars validly named elsewhere, and of cultivars not already named.

*Acanthus spinosus* Linnaeus cv. **Lady Moore**

Herbaceous perennial generally with persistent foliage (in severe winters frost may kill all leaves) and flowering shoots; leaves when first emerged (and for 4-8 weeks subsequently) cream-white except about main veins and margins which are flushed green; the cream-white colour gradually fades, becoming somewhat streaked as the leaves age, becoming dark green.

Voucher specimen: DBN - cult. Graigueconna, Bray, Co. Wicklow, Rosemary Brown, 1989.09.01.

This is not a new cultivar, but one well-known in the Dublin area and called, by all and sundry, *Acanthus* 'Lady Moore'. This name was used in the fact-sheet accompanying the first series of 'A Growing Obsession' (RTÉ TV) but it was not validly published there. In the second and third editions of *The Plant Finder* (Philip and Lord, 1988; 1989) this *Acanthus* was noted as a plant that deserved to be more widely grown, but Philip and Lord used *Acanthus* 'Phylis Moore' - this is invalid as there is no accompanying description. Because *Acanthus* 'Lady Moore' is the name used about Dublin, where the plant is grown in numerous gardens, that is the form preferred, and this note is a means of establishing the name; as this was being drafted, Graham Stuart Thomas (1989) published a note about *Acanthus* 'Lady Moore' describing the young foliage as 'so heavily spotted with white that it appears to be silvery grey'.

The history of *Acanthus* 'Lady Moore' is not recorded, nor is any adequate reference known to it in periodicals and books hitherto published. According to most people who have known the cultivar for many years, including the late David Shackleton, the plant was distributed by Lady Moore, but that does not mean it arose in her garden.

Other plants named for Lady Moore include the extant *Chaenomeles* 'Phylis Moore', the broom *Cytisus scoparius* 'Lady Moore', and several now extinct plants - *Lachenalia* 'Phylis Paul', *Nerine* 'Mrs Moore' and *Papaver orientale* 'Lady Moore'. An *Agapanthus* cultivar, a dwarf, white-flowered plant, has also recently acquired the name 'Lady Moore' (see e.g. *The Plant Finder*), but its origins, indeed its connections with Lady Moore, are extremely obscure.

*Calluna vulgaris* (Linnaeus) Hull cv. **Celtic Gold**

Subshrub, evergreen, with erect shoots; summer foliage bright yellow-green (RHS CC 154A), and remaining yellow during winter; inflorescences erect in a narrow spike; flowers white with white reflexed petals and pale brown anthers; mature stem pale brown with short, sparse indumentum.

Voucher specimen: DBN - cult. The Locks Nursery, Scarva, J. Morris, 1989.08.16.

This golden *Calluna* cultivar was selected and introduced by John Morris, The Locks Nursery, Scarva, County Armagh, from whom came also the double-blossomed *Begonia* 'Scarva Cherry' described in *Moorea* 6. *Calluna* 'Celtic Gold' was a chance seedling in The Locks Nursery about 1985. It has brilliant yellow-green summer foliage, remaining yellow (although somewhat darker) in the winter. The flowering shoots are narrow giving well-established plants a spiky appearance.

'Celtic Gold' was registered with the Heather Society in 1989.

*Celmisia* cv. **David Shackleton**

Herbaceous perennial; foliage persistent (not deciduous), leaves forming a rosette, c. 40 cm diameter, to 25 cm tall; each leaf broadly sword-shaped (obovate), pleated, to 25 cm long, c. 5 cm across at the broadest point (above middle), clothed with a persistent indumentum of long, closely appressed transparent hairs - this covering of hair is so dense especially on the young leaves that the leaves are silver-white; flowering heads sometimes normally formed (ray florets white, disc florets yellow), but more usually they are malformed without ray or disc florets; flowering stems with foliose bracts, densely hirsute).



Voucher specimen: DBN - cult. Beech Park, Clonsilla, E.C. Nelson, 1986.06.00

The spectacular mountain-daisy named here was one of David Shackleton's greatest delights; it was seen on the programme in the RTE TV series 'A Growing Obsession' but was not named there, nor in the accompanying fact-sheet. It is appropriate that this plant should bear his name as he nurtured it and began selectively to distribute it to fellow enthusiasts.

The cultivar, when well-grown, is brilliant silver-white, robust and prolific; offsets can be removed and will root easily. David Shackleton always removed the flowering stems when they appeared as these usually terminated in scruffy, aborted capitula; only very occasionally did normal "flowers" appear. As the plant's great character derives from its foliage, the removal of the flower stems does not detract in any way from its splendour.

David Shackleton intended exhibiting this *Celmisia* at the Alpine Garden Society's Irish shows, but his illness during the spring of 1988 did not allow this. This past year Helen Dillon showed a plant of *Celmisia* 'David Shackleton' (as an unnamed cultivar of *Celmisia semicordata*) at the Ulster Alpine Garden Society Show (Greenmount, April 1989) and was awarded first prize in Section B (silver foliage plant); at the Southern Ireland Alpine Garden Society show (Dublin, May 1989), she was awarded another first prize in Section B. *Celmisia* 'David Shackleton' is assuredly destined for higher awards.

As I have noted, David Shackleton delighted in this *Celmisia*; its history held an ineluctable irony and he would frequently speak about it with that characteristic twinkle-in-his-eye so well-known to his friends. The prototype of *Celmisia* 'David Shackleton' came from the scree-bed in the National Botanic Gardens, Glasnevin, about 1980. David's passion for *Celmisia* prompted him to acquire forms that seemed different and unusual, and this particular plant had attracted his attention, but not because of its silver foliage - it did not display that character in the scree! As it was an unfamiliar daisy he sought to "rescue" it and when an offset was transplanted to Beech Park, Clonsilla, it flourished and grew lushly into the startling silver rosette which characterises the cultivar.

*Celmisia* 'David Shackleton' requires, indeed thrives in, a rich, well-drained soil in full sun. It can only be propagated vegetatively.

This plant is named in memory of David Shackleton from whom we all learned much about the art of gardening, and its history in Ireland during the present century. While he would undoubtedly demur that this plant should bear his name, it is considered one of the few cultivars worthy of such an honour. David frequently joked about the *Celmisia* and suggested several names for it, all of which will remain unpublished, the private badinage of friends.

#### *Cytisus scoparius* (Linnaeus) Link cv. Baronscourt Amber

This new introduction from Baronscourt Nurseries was listed in the nursery's *Retail catalogue and price list 1988-1989* but not described; the name, therefore, was not validly published therein.

This broom cultivar, which from a distance, has amber coloured blossom, awaits formal precise description. It is available from Baronscourt Nurseries and Garden Centre; the name was published in *The Plant Finder* (ed. 3).

#### *Daboecia cantabrica* (Hudson) Koch cv. Celtic Star

Subshrub, evergreen, differing from all other cultivars of *D. cantabrica* in its fleshy, petaloid sepals (Figure 1) which are red (or pink), c. 8 mm long, c. 15 mm broad; corolla c. 9 mm long, c. 6 mm diameter, pale lavender (RHS CC 78C).

Illustration - Figure 1 (opposite).

Voucher specimen: DBN - cult. Connaught Parade, Phibsborough, Dublin 7, E.C. Nelson, 1989.08.22.

*Daboecia cantabrica* is not a particularly variable species in Ireland, but several outstanding cultivars have come from the wild peatlands of Connemara - a white-blossomed plant was known by the 1810s; in the mid-1930s Mrs Praeger found and propagated the beautiful red cultivar ('Praegerae'), and more recently the double-blossomed plant ('Charles Nelson') was discovered at Carna (Nelson, 1984). This new cultivar, with remarkable fleshy, large sepals, was discovered by David McLoughlin on the Errislanann Peninsula south of Clifden, about 1987.

The flowers are enhanced by the strange bright red calyx against the pale lavender bell (in shade the calyx is pallid pink). Perhaps seedlings from this plant will produce other elegant forms later.

*Daboecia cantabrica* 'Celtic Star' was registered by David McLoughlin with the Heather Society in 1988. The original plant, like that of 'Charles Nelson', is still growing in the wild, on a rocky knoll beside Lough Usk; it was shown to me in August 1989 by David McLoughlin. Nearby are a number of white-flowered *Daboecia* plants. The original 'Charles Nelson' was also revisited in August 1989 - it flourishes beside a rock wall at Carna where it was first seen ten years ago.



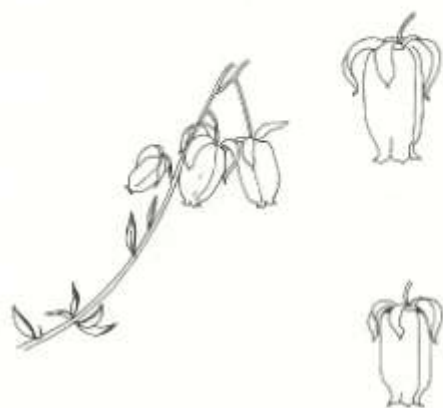


Figure 1. *Daboecia cantabrica* 'Celtic Star' - flowering shoot and two flowers showing enlarged sepals (Bernie Shine) (about life size).

#### *Erica mackaiana* - two new cultivars from Spain

In 1982, David Small, David McClintock and I collected a series of heathers during a field-trip in Spain (McClintock, 1983). The cuttings, rooted at Denbeigh Heather Nursery (DHN), Ipswich, were later shared between the nursery, Dr McClintock and the National Botanic Gardens, Glasnevin. Since 1983 our *Erica mackaiana* selections have been growing in a peat bed in the nursery at the Botanic Gardens, and none of the plants succumbed to the severe winters experienced over the last few years, although many were lost in the two English gardens. In 1989, the plants at Glasnevin were critically examined by Small, McClintock and Nelson, and two of the Spanish *E. mackaiana* collections were singled out for introduction into commerce. The most spectacular of these is the white-blossomed cultivar (DHN 15/82) which has been given the name 'Shining Light' - this plant has already been shown at an RHS show in London (under the tentative name 'Shining White' but the originators were not happy with that name and although published in a catalogue issued by Tessa Forbes, Plaxted, Kent, it is invalid under the *International Code of Nomenclature for Cultivated Plants*, Art. 41). The other cultivar is a robust heather, with rich purple flowers, growing more vigorously and more erect and with "branched" inflorescences unlike any of the Irish selections of *E. mackaiana* hitherto available. The two cultivars are formally named below.

#### *Erica mackaiana* Babington forma *eburnea* Nelson & McClintock, cv. Shining Light (olim 'Shining White' - invalid).

Evergreen subshrub to 0.3 m tall; leaves dark green, 4 mm x 1 mm with prominent glandular hairs; inflorescences numerous; flowers white (buds with cream-green tips); corolla 7 mm long, 4 mm diameter; stigma just protruding from mouth, dull red; anthers amber.

Voucher specimen: DBN - cult. in National Botanic Gardens, Glasnevin (DHN 15/82; NBG acc. no. 1983.001246), E.C. Nelson, 1989.09.01 (collected Monte Castello, Galicia, Spain. 1982.07.23).

#### *Erica mackaiana* Babington cv. Galicia.

Evergreen subshrub to 0.5 m tall, bushy; leaves 4.5 mm x 1 mm with prominent glandular hairs; inflorescences "branched"; flowers red purple above (RHS CC 70A-72C) shading almost white beneath; corolla 7 mm long, 4 mm diameter; stigma just protruding from mouth of corolla.

Voucher specimen: DBN - cult. in National Botanic Gardens, Glasnevin (DHN 84/82; NBG acc. no. 1983.001284), E.C. Nelson, 1989.09.01 (collected Monte Castello, Galicia, Spain. 1982.07.22).

Propagation materials of these cultivars were made available to the Locks Nursery, Scarva, County Armagh and to the Regional Nursery, Dundrum, County Dublin in 1989; material will be made available to others on request.

Most of the white-flowered collections of *Erica mackaiana*, distinguished as forma *eburnea*, from Spain were discussed by Nelson and McClintock (1984) and the characters of the individual plants were there detailed. DHN 15/82 was not collected as a herbarium specimen, and therefore was not included in the analysis as that was confined to those plants for which dried voucher specimens were available in the herbarium, National Botanic Gardens, Dublin. The new cultivar 'Shining Light' can easily be distinguished



from the only other named white-blossomed cultivar of *E. mackaiana* ('Dr. Ronald Gray') by its more floriferous habit, its bushier, taller stature, and by the abundance of gland-tipped hairs on the leaves. The corolla is also larger. In 'Dr. Ronald Gray' the stigma and anthers are malformed, whereas in 'Shining Light' they are perfect.

***Helleborus orientalis* Lamarck cv. Graigueconna**

Herbaceous perennial, to c. 60 cm tall, with deciduous foliage and flowering stems; foliage irregularly and minutely speckled with light green and cream or white, not overwintering; flowers nodding, pale creamy-green.

Illustration - Brown, 1987, p. 27 (colour photograph).

Voucher specimen: DBN - cult. Graigueconna, Bray, County Wicklow, Rosemary Brown, 1989.01.00

The overall effect of the speckled foliage is pale green-grey, quite unlike the foliage of any other hellebore. As related below by Rosemary Brown, a small proportion of the seedlings raised from 'Graigueconna' come true; they show the same speckling of the foliage, suggesting that the particular type of variegation is genetically controlled, but this has not been scientifically investigated.

*Helleborus orientalis* 'Graigueconna' was named several years ago - the name first appeared in Rosemary Brown's own account of her garden (in Connolly and Dillon, 1986) in the caption of a photograph; no description was given, so it is probable that this note represents the first valid publication of the name. The name also appeared in the undated fact-sheet (Nelson, 1987) which accompanied the first series of 'A Growing Obsession' (RTE TV).

The history of 'Graigueconna' is as follows (note by Rosemary Brown). Several hellebores grew in the garden at Graigueconna when we came here in 1970. One appeared to be a form of *H. orientalis* with yellow-green flowers which bloomed before the other plants of *H. orientalis*. Also, unlike the usual form which retains leaves throughout the winter until the young ones replace them in the spring, this plant lost its deeply serrated leaves in late autumn and flowered before the leaves reappeared. I thought that it might be what was called *H. kochii* in gardens. This early *H. orientalis* does not usually set seed but several pods appeared about six years ago. The seed was sown as soon as the pods opened and germinated well. Amongst the tiny plants was one with speckled leaves which appeared just as strong a grower as the other green seedlings and in due course it was planted in a shady position in the wood. In two years it flowered. In most respects it resembles the others, having yellow flowers but blooms a little later and the leaves die down in winter. The speckling has remained constant and the plants set seed.

Two years ago one self-sown speckled seedling appeared but unfortunately due to my digging it up and potting on, it died after several months. Last year's (1987) seedlings were all green-leaved and I now await the next batch with hope. Two offsets of the plant have been successfully removed from the original plant and are now growing in other parts of the garden.

***Larix kaempferi* (Lambert) Carriere 'Hanan'**

Deciduous coniferous tree, differing from the typical form in its weeping habit; branches pendulous; leaves flat, to c. 20 mm long; <1 mm broad, with two stomatic bands beneath.

Illustration - Figure 2 (opposite).

Voucher specimen: DBN - cult. Kennedy Park, New Ross, Chris Kelly, 1988.10.00.

*Larix kaempferi* 'Hanan' has been selected and named by Chris Kelly, Director, The John F. Kennedy Arboretum, New Ross, County Wexford. The original tree (Figure 2) is in cultivation at the Park (immediately adjacent to the collection of *Potentilla fruticosa* (Rosaceae) collection), and young plants are in the National Botanic Gardens, Glasnevin.

Seeds of *Larix kaempferi* were obtained by the Irish State Forest Service in 1956 from Nagano, Japan, and were sown at the Camolin Forest Nursery, County Wexford. In 1965 a batch of seedlings were transferred to the Kennedy Park for planting in a shelter belt but within a few years it became obvious that one of these differed markedly from the others. This unique seedling had a slim habit and markedly pendulous branches. It has been named after Anthony M.S. Hanan, about whom Chris Kelly has written these notes.

Tony Hanan took his forestry degree from Trinity College Dublin in 1949. He worked in private forestry for the next three years, and did valuable work in the arboretum at Powerscourt. He entered the Forest Service in 1952, working at Shelton for two years. He served as a land acquisition inspector before joining the Research Branch in 1957 to work on the 1958 Census of Woodlands. Later, as Sectional Head, he was responsible for studies in tree species and timber technology. When, in late 1963, the Irish government, with financial assistance from Irish American societies, established the arboretum in memory of President Kennedy, he became its first director. For eight years, until his untimely death, he shaped this area of farmland into an arboretum of international standing. Among his publications is a valuable paper 'Southern hemisphere conifers in Ireland' (in E. Napier (ed.), 1972, *Conifers in the British Isles*, pp. 16-21).





Figure 2. *Larix kaempferi* cv. Hanan - the original tree. (Photograph by C. Kelly).





Figure 3. *Omphalodes verna* cv. Starry Eyes (photograph courtesy of Mrs E. Clark).



Figure 4. *Rubus* cv. Margaret Gordon (photography by E. Winters, courtesy of D. Wilson).



*L. kaempferi* 'Hanan' was registered with the International Registration Authority in 1989. One other weeping cultivar of *L. kaempferi* is recorded - 'Pendula' is described as having particularly drooping branchlet systems (Page, 1986), but Rushforth (1987) dismisses it as being only 'quite interesting but often no improvement on a normal seedling'. Grafting of 'Pendula' can produce a tree with branchlets a little more pendulous than usual, if a leader develops. In 'Hanan' the branches are pendulous, not the branchlets, so the whole habit of the tree is distinctive.

#### *Lobelia* - an elephantine miscellany

At the society's plant sale, Kilruddery 1988, a perennial herbaceous *Lobelia* was on sale under the cultivar name 'Eulalia Berridge'. This plant has a misty history but most recently it was distributed by Mrs Cicely Hall of Primrose Hill, Lucan (Hall, 1986). The plant was spotted a few years ago in Mrs Hall's garden by Graham Stuart Thomas; it was simply called Miss Berridge's *Lobelia* and, on hearing this, Mr Thomas enquired if the particular Miss Berridge was Eulalia Berridge. Thus the *Lobelia* acquired the name 'Eulalia Berridge'.

Miss Berridge certainly did not raise this cultivar herself; she obtained it from her mother, and in conversation with Rosemary Brown recalled that the particular cultivar was grown at Ballynahinch Castle, Connemara, which was the family's home. It has been suggested that Miss Berridge (or her mother) obtained it from Annes Grove, the Annesley's garden in County Cork. However, there is a possibility that this is a unique survivor - one of the cultivars that was raised towards the beginning of this century at St Anne's, Clontarf - the two "Annes" may have become confused with the passing of time. Among the *Lobelia* cultivars that Andrew Campbell raised at St Anne's were 'Gloire de St. Anne's', 'Lord Ardilaun', 'Morning Glow', 'The Bishop' and 'Firefly' - they are *Lobelia syphilitica* hybrids involving *L. cardinalis* and perhaps other species. The proximity of Ashford Castle (at Cong) which was also owned by Lord Ardilaun, and Ballynahinch, Connemara, seems to point towards this possible history, but there is no sufficient description that could indubitably link 'Eulalia Berridge' to any of the Ardilaun plants. The only matter that can be stated with certainty is that *Lobelia* 'Eulalia Berridge' has been cultivated in Ireland since the 1930s at least, and nothing resembling it was known, at least to Graham Stuart Thomas, among the herbaceous *Lobelia* cultivars grown in Britain.

#### *Lobelia* cv. Eulalia Berridge.

Deciduous perennial herb with erect flowering stems, reaching to about 1 m tall; flowers are pink (RHS CC 54A).

Illustration - Walsh (in press).

Voucher specimen: DBN - cult. Primrose Hill, Lucan, County Dublin, E.C. Nelson, 1989.08.12.

The story of the *Lobelia* cultivars does not, however, end there for 'Eulalia Berridge' has produced a daughter that is one of the finest perennials for the late summer garden, a vigorous plant, growing eventually to about 2 m tall, and flowering for many weeks - the individual blossoms open in succession beginning at the base of the flowering spike. A miscellany of names has been suggested for this stately plant and of them the one finally chosen for publication, and approved by Cicely Hall, is 'Pink Elephant' - Mr Thomas disapproves but the originator approves!

#### *Lobelia* cv. Pink Elephant.

Deciduous herbaceous perennial; stems tinged red, ribbed, hirsute; leaves sparsely hirsute above, glabrous below; flowers pink (RHS CC 63A-B); sepals lanceolate, margins recurved, with sparse indumentum; corolla tube with parallel sides, slightly ribbed, with sparse indumentum on ribs at least in bud; 3 lower corolla lobes  $\pm$  equal, 2 cm long, c. 0.8 cm broad; 2 upper lobes erect, 2 cm long, 0.4 cm broad; 'boss' at mouth of corolla tube pink; anthers with grey-green (RHS CC 189B) pollen.

Illustration - Walsh (in press).

Voucher specimen: DBN - cult. Primrose Hill, Lucan, County Dublin, E.C. Nelson, 1989.08.12.

*Lobelia* 'Pink Elephant' was a chance seedling from 'Eulalia Berridge' that arose at Primrose Hill, Lucan. It has been distributed to a few private gardens by Mrs Cicely Hall, but is not yet available commercially.

A second seedling, also probably from 'Eulalia Berridge', has been selected by Mrs Hall, and named *Lobelia* cv. Spark - it has bright red flowers (RHS CC 46B) with a prominent white boss at the mouth of the corolla tube.

Illustration - Walsh (in press).

Voucher specimen: DBN - cult. Primrose Hill, Lucan, County Dublin, E.C. Nelson, 1989.08.12.

These three *Lobelia* cultivars will be illustrated in a watercolour painting by Wendy Walsh to be published in 1990.



***Omphalodes verna* Moench cv. *Starry Eyes***

Flowers differing from those of the typical cultivated plant by having petals rimmed with pale mauve-blue; centre of each petal deeper blue (this portion irregular in outline).

Illustration - Figure 3 (page 46).

*Omphalodes verna* 'Starry Eyes' was noticed about 1981 as a sport on a large clump of the normal form by Mrs Eithne Clark in her garden at Woodtown Park, Rathfarnham, County Dublin. She propagated it, and in 1987 brought some offsets to me. I propagated it and distributed it to a few gardeners; at that time the plant was not named.

This new cultivar has striking flowers - the pale rim and dark central flash on each of the five petals gives the individual blossoms a starry appearance. It is as vigorous a plant as the parent, blooming profusely in the spring and easily propagated by division or removal of offsets.

*Omphalodes verna* 'Starry Eyes' is not available commercially as yet.

***Potentilla fruticosa* Linnaeus 'Pink Panther' (cf. *The Plant Finder*)**

I am reliably informed that this name is a synonym for 'Princess', a cultivar on which Plant Breeders Rights apply within the United Kingdom (Blooms Nursery, Bressingham, hold these rights). This name should not be used, and anyone propagating 'Princess' (as 'Pink Panther') within the United Kingdom, or supplying plants to nurseries within the United Kingdom under the name 'Pink Panther', could be liable to prosecution unless they are paying royalties to the holder of PBR. *Potentilla* 'Pink Panther' was noted in *The Plant Finder* (ed. 3).

***Rubus* 'Margaret Gordon'**

Vigorous shrub to at least 2 m tall; shoots brown with exfoliating, papery bark; leaves deciduous 3-lobed, to 6 cm long, to 7 cm broad, base cordate; lobes with serrate margins, teeth also serrate, two basal lobes to 4 cm long (from base to tip); petioles red, with glandular hairs; stipules persistent, to 1.5 cm long, apex bifid, red becoming pale brown. Flowers white, borne singly on lateral shoots, to 10 cm diameter; sepals with attenuated apex which broaden towards tip, green, reflexed after anthesis, persistent and becoming red after petals fall, eventually rich claret in colour; petals more or less triangular in outline, with cuneate base, apex irregularly dentate (individual teeth to 5 mm deep), 5 cm long and 5 cm broad, of crumpled, silky texture; stamens numerous; anthers cream, darkening after anthesis and eventually black; styles numerous, tightly clustered, creamy-gold.

Illustration - Figure 4 (page 46); *Horticulture Week* (28 July 1989): 7.

Voucher specimen: DBN - cult., Tyane, Portlengone, Co. Derry, D. Wilson, 1987.05.00.

*Rubus* 'Margaret Gordon' is an excellent shrub, similar to *Rubus* 'Benenden' (commonly known as *Rubus* 'Tridel' - an invalid name), but finer in many ways, especially in its larger, brilliant white flowers; it can be distinguished from 'Benenden' by the conspicuously toothed outer margin of the petals (Figure 4).

'Margaret Gordon' is named for the wife of Bob Gordon who raised this shrub from seed of 'Benenden' in the 1970s. It was originally given prominence on the Ulster Television series 'How Does Your Garden Grow' which was filmed in the mid-1980s; the plant was not, however, validly named then. In recent months it has received publicity following an agreement between Bob Gordon and Baronscourt Nurseries whereby Baronscourt Nurseries will propagate and promote the plant (see *Horticulture Week*, 28 July 1989: 7). The cultivar is under trial in Holland, France and Germany. The original plant is still in cultivation in the Gordon's garden, and plants are in the National Botanic Gardens, Glasnevin.

The cultivar has been noted in *Horticulture Week* (loc. cit.) and therein described as 'a medium to large shrub ...', and in *Baronscourt Nurseries and Garden Centre's 1988-1989 price list*; it was also noted in *The Plant Finder* (ed. 3). This is the first formal publication of a full description of the plant.

*Rubus* 'Margaret Gordon' is available from Baronscourt Nurseries. It is stated that the nursery has applied for Plant Breeders Rights to this plant, but having released it to the trade this is unlikely to be effective, and would only apply, under current legislation, within the United Kingdom.

**References**

- Brown, R. (1986). Graigueconna, in Connolly, S. and Dillon, H. (editors). *In an Irish garden*. London; Weidenfeld and Nicholson.
- Hall, C.M. (1986). Primrose Hill, in Connolly, S. and Dillon, H. (editors). *In an Irish garden*. London; Weidenfeld and Nicholson.
- McClintock, D. (1983). Iter Hispanicum Ericaceum. *Yearbook of the Heather Society*: 33-40.
- Nelson, E.C. (1984). *An Irish flower garden*. Kilkenny; Boethius Press.



- Nelson, E.C. (1987). *A Growing Obsession* (fact-sheet). Dublin; Radio Telefis Eireann.
- Nelson, E.C. and McClintock, D. (1984). Two new wild white-flowered heathers (*Erica andevalensis* and *E. mackaiana*) from Spain. *Glasra* 7: 35-40.
- Page, C. (1986). *Larix*, in *The European Garden Flora I*. Cambridge; University Press.
- Philip, C. and Lord, A. (1988). *The Plant Finder*. (ed. 2). Whitebourne; Headmain Ltd.
- Philip, C. and Lord, A. (1989). *The Plant Finder*. (ed. 3). Whitebourne; Headmain Ltd.
- Thomas, G.S. (1989). Treasures from the past. *The Garden* 114 (8): 378-384.
- Walsh, W.F. (in press). [untitled]. Belfast: Blackstaff Press (due 1990).



#### EILEEN MAY McCracken (1920-1988)

Garden history had few proponents in Ireland before the 1960s when Eileen McCracken developed her interest, a vigorous offshoot of research on Ireland's woodlands and the associated trade in timber. *The Palm House and Botanic Gardens, Belfast* (1971), in which she documented the building and subsequent neglect of one of Ireland's finest Victorian buildings, was a signal work - one direct consequence was the restoration of the glasshouse. Research on the Belfast Botanic Gardens Park led Eileen to begin studying the history of other botanical gardens in Ireland, and in the 1980s she shared the information she had garnered with me, and together we wrote *The Brightest Jewel, a history of the National Botanic Gardens, Glasnevin, Dublin* (1987).

Eileen May McCracken was born in Lisburn, County Antrim (16 February 1920). She studied at The Queen's University, Belfast, gaining degrees in botany (B.Sc.), and botany and geography (B.Sc. Hons.), before proceeding to work for her M.Sc. and doctorate; her doctoral thesis was to bear fruit in the form of *Irish woods since Tudor times* (1971), the authoritative book on the history of woodlands in Ireland during historic times. Dr McCracken's publications from 1947 until her death in 1988 ranged through the diverse topics of the history of gardens and tree-planting in Irish counties to accounts of charcoal-burning ironworks; in the last few years she turned her attention to the gardens of South Africa, and with her son Donal wrote *The way to Kirstenbosch: a history of South African botanic gardens* (1988). (A full bibliography will be published in *Glasra 1* (ns)).

Eileen McCracken was for a time lecturer in geography at the University of Witwatersrand, and while her husband, J.L. McCracken, was Professor of History at the New University of Ulster she taught in a local school at the same time pursuing her arboricultural and historical researches. In hope of gaining respite from illness she and Leslie returned to South Africa in the early 1980s. Dr McCracken died on 12 November 1988 in Durban.

Eileen was a generous teacher and critical scholar, an entertaining hostess, and a redoubtable champion of Ireland's garden heritage, especially, the great glasshouses of Richard Turner. A native specimen of *Arbutus unedo*, the evergreen strawberry tree, has been planted in the National Botanic Gardens, Glasnevin, as a memorial marking where her ashes have been sprinkled.

E.C. Nelson



## Book Reviews

John KELLY. *Sowing a better garden*. 1988. pp. 159; illustrated. London: Unwin Hyman. ISBN 0-04-440222-8. UK£14.95.

A new popular book on raising plants from seed is long overdue. John Kelly is a scientifically-minded gardener keen to explain this art to a wide readership. There are three distinct elements to the book, skilfully interwoven.

Firstly, to conjure up enthusiasm for seed propagation, a combination of text and colour plates has been employed. All gardening books should allow the reader to fantasise a little - about drifts of dwarf rhododendrons, the great range of specimen trees or the exact variety of exotic vegetable that the gourmet cookbook prescribes. The most telling argument he makes is that the horizons of most gardeners are greatly expanded when seed raising becomes the normal source of plants for the garden. The seed-raiser is then 'gardening in the first division'.

A businesslike account follows of the technicalities associated with the biology of seeds and raising plants from seed. Germination patterns are difficult to describe and not truly understood in a systematic manner; however, we are treated to a good selection of examples, and what is fundamentally important, encouraged to 'think like a seed'! Intuitive success in gardening, in areas where guidebooks do not help, can sometimes be achieved like this. The other approach, that of clinical experimentation with many treatments, is usually impractical with a mere pinch of seed. All aspects of the plant-raising process are dealt with: seed collection, preparation, labelling and storage, germination and growing on. The descriptions given would permit a relative newcomer to perform these tasks with some confidence. Detail is prolific, down to the instruction always to include the code number of expedition-collected seed on seedling labels.

The third part of the book comprises three lists giving instructions on a species-by-species basis for woody plants, perennials and bulbs. Irish Garden Plant Society members have been described as 'demon seed raisers' and will probably find these lists the most helpful section. A total of 213 difficult-to-germinate types are included in the lists, and I do not know of a more useful source of this information. It will be interesting to discover if the seed-raising expertise of members is, in fact, improved by perusing it.

As with most books there is room for improvement. Omission of two practical matters,

both to do with domestic refrigeration, surprised me. The chilling of imbibed seed can easily be achieved by placing it between layers of moist paper, flat, in a small polythene bag. Bags with a zip seal are ideal and a plastic sandwich box can accommodate many of them in the normal fridge compartment, without disturbing domestic harmony. The author implies that seed, compost, pot and all should be chilled. A more important omission, in my view, is the knowledge regarding deep frozen storage of seed. Most fresh, clean seed, after drying against a desiccant such as silica gel for a couple of weeks, can be stored indefinitely at domestic deep-freeze temperatures. This procedure is ideal for the amateur. Its use means that the annual seed collection can be rationalised, and excess seed stored for another season. For many choice plants, good seed years may be infrequent.

I have another niggle, which has probably more to do with the publisher than the author, concerning the use of illustrations. In a book of this type, every picture must earn its keep. The best illustrations are the fine line drawings set in the wide margin and used to advantage against the correct text paragraph; there are not enough of them. Next, is a series of black and white macro-photographs of germinating seeds. The captions do not do them justice and a book-design fault has led to the sequence being broken by the first group of eight colour plates. Only one colour plate deserves mention - a striking "macro" of miscellaneous seeds to illustrate diversity of size and form. This plate is not well-captioned, nor does it relate well to the text. It could be used to encourage us all to use a magnifying lens more frequently to inspect seeds and other plant parts.

None of the colour plates is as good as those in John Kelly's two other current publications, *Foliage in your garden* and *The all season garden*. All but the seed "macro" are decorative and concerned with motivation of the reader, rather than instruction. Can we, the garden book-buying public, persuade publishers that intelligently written books do not have to include dubiously relevant, but expensive, colour plates?

On the whole, the book is a useful and attractive package for gardeners, achieving the aim of the author in encouraging an experimental and thinking approach to the subject. The stock of booksellers would move faster, however, with a fiver off the price.

David Jeffrey



Heinz JENNWEIN. *Avocado, banana, coffee; how to grow useful exotic plants for fun*. British Museum (National History), London. ISBN 0-565-01040-9. UK£4.95 pbk.

About 70 different plants, mainly tropical in origin, are treated in this little paperback which would make a wonderful gift for a young gardener keen to try exotica. Sugar cane, lulo, shadok, pistachio and even vanilla are included, along with hardier subjects such as fig, pomegranate, and *Arbutus*. It was written in German for an audience not used to mild winters, and the translated and edited English text does not always take full note of the potential for outdoor cultivation - for example under *Actinidia* the author advises 'against open air cultivation ... it can survive for several years but a severe winter will destroy it', although he (or his editor) added 'however, in warmer parts of England it can prove to be quite hardy'. As for *Arbutus unedo*, again 'warmer parts of England' are invoked - the species is quite hardy throughout Ireland and is tolerant of lime (a fact noted by the translator 'with some bewilderment'). These lapses serve only to indicate that a horticulturist familiar with these plants should have been asked to peruse the translation!

Overlooking the peculiarities caused by 'warmer parts of England', this is a fascinating book, beautifully illustrated in colour.

E.C. Nelson

Marion COOPER and Anthony JOHNSON. *Poisonous plants and fungi*. 1988. pp. 134; illustrated. London, HMSO. ISBN 0-11-242718-9. UK£8.95.

In the preface of their excellent handbook, the authors offer us a definition of a sort: a plant may be termed poisonous, because of the frequency or severity of incidents associated with it. They remind us, however, that new plants will be added to this category from time to time, and that susceptibilities to plant poisoning differ widely. Fortunately, such incidents are relatively rare in these islands, though the Irish climate allows us to grow a wide range of plants, and we should be aware that some of these might present a problem in certain circumstances. Gardeners should also note that a number of cultivars may contain appreciably more poisonous substances than their wild relatives.

This book is an illustrated guide to the plants which are known to cause problems - over 100 wild and garden plants, house plants and fungi. It is eye-catching (HMSO knows as well as any other publisher the value of an attractive cover), well laid

out and beautifully printed. A highly informative introduction precedes the main section, where the plants are grouped in families (related plants may share the same poisonous constituents and cause similar symptoms). Families are listed alphabetically, but no taxonomic knowledge is required - both common names and their Latin equivalents are listed and indexed. There are short notes on the family, and half a page on each plant, including information on the poisonous constituents and, especially significant, the circumstances under which poisoning may occur. An abbreviated list of other poisonous plants completes the main section, which is followed by the colour illustrations and finally, the fungi.

It is made clear that poisoning does not come about only by ingestion of part of the plant; contact with irritant sap can provoke severe reactions, as in the case of *Dieffenbachia* (dumb cane), where sap transferred from hand to mouth may cause swelling of the throat, and *Heracleum mantegazzianum* (giant hogweed), the sap of which photosensitises the skin and can cause painful blisters. Daffodil packers too, may develop dermatitis through constant contact with sap.

There is some noteworthy information: e.g. onions contain compounds which cause the breakdown of red blood cells in many animals, including the family pet; apple pips in quantity could cause cyanide poisoning - so can raw elder fruits, and the oxalates in rhubarb leaves actually caused a number of fatalities when they were eaten during the First World War. Even burning oleander trimmings would be unwise - smoke from the fire is toxic, and the common ink cap, an edible fungus, is poisonous only in the presence of alcohol. From Socrates to the unfortunate Georgi Markov, who was dispatched, you may remember, by a jab from an umbrella whose tip was thought to contain the protein ricin (derived from the seeds of *Ricinus communis*) - all is here. Children aside, human poisoning by ingestion is usually due to misidentification. In animals it can come about through boredom, lack of food, or new surroundings or opportunities. Never present an opportunity by disposing of hedge clippings in a ditch or on farmland.

There is not much to find fault with; the colour photographs, mostly of flowering plants, are adequate (3 plates are upside down!), though the fungi make better subjects. Simple presentation of information from medical and veterinary fields makes it a most valuable reference book for gardeners and others. It should belong in every gardener's library.

Judy Cassells



G.B. CHARLESWORTH. *The opinionated gardener. Random offshoots from an alpine garden.* pp. x, 197. David R. Godine, Boston (Mass., USA). ISBN 0-87923-672-8. US\$16.95

Professor Charlesworth is a retired mathematician and, much more significantly, one of that race of gardeners smitten with the passion for alpine plants although clearly he is catholic in his likes and dislikes. He is a provocative and interesting writer with a sparkling wit which makes this potpourri a joy.

He is opinionated, as the title suggests, yet there is nothing in this volume with which I could disagree absolutely, and the gentle levity with which he 'sends up' certain botanical and horticultural pomposities makes the essays irresistible reading. He combines knowledge with light-hearted barbs - his key to plants is delightful fun and also teaches one how to use keys:

- |                             |                                  |
|-----------------------------|----------------------------------|
| (5) Plant refuses to flower | Could be <i>Campanula zoysii</i> |
| Plant not as above          | Could be <i>Myosotis</i> sp.     |

He has a 'go' at plant names, extols the virtues of labels and counterposes their drawbacks - 'If you cannot see them they lose their purpose and if you can you wish you couldn't'.

The miscellany of essays republished in this book are on divers topics, and include lists of recommended plants from annuals to the 'crème de la crème' - he writes of *Eritrichium nanum* that 'Nobody gets to Valhalla on this one' and meanders through penstemons, campanulas and primroses. Included is an opinionated list of essential books ('Graham Stuart Thomas has written a book ...', 'And everything written by Gertrude Jekyll is worth reading' - everything, really?). 'Why does one take photographs? Isn't it obvious? You don't have a plant until you have a slide of it.' There are discussions of hierarchies, of taste (gnomes! - 'If your immediate reaction is a patronising dismissal of both gnome and owner, you had better examine very carefully your own trash-filled life.'), and perennials, *Androsace*, Rock-garden Latin, and 'Does "Pleasure" bring happiness?' 'Gardening doesn't need to be inflated or trivialized into something it is not. Is gardening an obsession? Yes!' - that's Charlesworth (not Nelson), and of course we all say "Amen". I cannot do full justice to Geoffrey Charlesworth's book in a short review; I can merely recommend it even to those not smitten by alpines, and especially to those who are inclined to take gardening too seriously. It is fun, full of wisdom and incisive observations, and it had me chuckling. Mind you, I am sure this book will irritate some - but then, isn't that its purpose?

E.C. Nelson

D. OTTEWILL. *The Edwardian garden.* Yale University Press, 1989. pp. x, 230; illustrated. New Haven and London: ISBN 0-300-04338-4. UK£24.95; \$50.

This volume is most handsome, beautifully illustrated with multifarious modern and antique photographs, reproductions of paintings and maps, and engravings; a few of the photographs in the review copy suffered from poor registration but this is presumably only a rare occurrence. There is a full set of footnotes, a bibliography and a comprehensive index. Protected in a simple slip case, composed of 240 pages, 10.5 x 11.25 inches, with 305 figures, and printed endpapers, this is a true bargain at UK£24.95.

The principal gardens of David Ottewill's book are those created between the 1880s and the First World War - not strictly 'Edwardian', not strictly conforming to the monarchs, but all of a period when the building of 'country houses' flourished especially in England. Such houses required gardens, and the result was a portfolio of diverse gardens in which the new affluent set enjoyed 'one long garden party', designed gardens in which architectural features and plantings blended in a remarkable unity. Most of the examples described, and magnificently illustrated, in this volume are in Britain, but half a dozen Irish gardens are noted.

Gertrude Jekyll and Edwin Lutyens are among the principal characters who created these gardens; William Robinson was also at his bombastic climax during the period, and it is noteworthy that Mrs Norah Lindsay, a native of County Galway, was active then too - her design for Blickling's parterre has survived, beautifully maintained by the National Trust, whereas her own garden at Sutton Courtney, and plantings at Cliveden have vanished.

Of the Irish gardens noticed by David Ottewill, it is pleasing to note them described with superlatives: Annes Grove 'is a secluded paradise where the natural groupings of exotics and native plants approaches perfection'; Heywood is reckoned as Lutyens' most important garden in Ireland; at Inacullen, Harold Peto succeeded in echoing 'a more distant age, recalling Pliny's description of Roman seaside villas and evoking the eternal spirit of antiquity', and its 'jewel' is the sunken pool garden. The other gardens described are Lambay Island and the Japanese Garden at Tully, and there are passing references to the Irish National War Memorial at Islandbridge, and to Mount Stewart, both of which fall outside Ottewill's Edwardian overview.

E.C. Nelson



Christopher GREY WILSON. *The Genus Cyclamen*. 1988. pp. 147; illustrated. Royal Botanic Gardens Kew. ISBN 0-7470-1221-0. UK£13.95.

Outside my window the frost is cold on the ground, yet my patch of *Cyclamen coum* are showing their first flowers as, appropriately, I look at their beautiful illustration on the cover of this fine book.

*The Genus Cyclamen* is an erudite and comprehensive monograph on this isolated genus of the primrose family. The twelve colour plates by Mary Grierson are a joy to look at, depicting with her meticulous care and exact representation, each of the nineteen species in their infinite variation. These, combined with the excellent and informative line drawings by Judith Gauden and the many maps on distribution, fully complement the text.

In the first chapter, David Meikle gives us a short history, the name *Cyclamen* having been consistently applied to the genus since the days of the Greek philosopher Theophrastus (c. 372-286 BC), who was also a botanical writer. Christopher Grey Wilson then writes an authoritative and full account of the plant, starting with general descriptions as to botanical character, cytology, conservation etc. He continues with a key to the species followed by a full description of each, which includes details of their cultivation in garden or greenhouse. The last chapter deals with hybrids. There is also information about the Cyclamen Society and, at the end, six blank pages for those who wish to record their own notes.

*The Genus Cyclamen*, whilst primarily a 'botanist's book', will be of equal interest to all who grow and cherish these small plants in their garden, to whom the sight of a patch of green and silver-marbled leaves lightening a dark corner is as delightful as the colour and fragrance of the delicate and elegant flowers.

Wendy Walsh

David STUART and James SUTHERLAND. *Plants from the Past*. 1987. pp. 254; illustrated. London: Viking. ISBN 0-670-80852-0. UK£14.95.

'Plants from the Past' is the name of a plant nursery near Edinburgh owned and run by the co-authors. In this book of the same name they set out to instruct the reader about the order of introduction of the common plant groups into the British Isles, so that one can roughly know which plants would have been available for growing in a medieval to nineteenth-century garden.

Not only were the plantings changing, but the styles and layouts were also slowly evolving as fashions and social conditions altered. The

medieval period had its wooden arbours, trellises, flowery medes and turfed banks planted perhaps with thyme or camomile used as seating. In the sixteenth century, while many of these features were retained, there was an obsession with knot gardening; the trellises became grander, more formally classical. The seventeenth century saw the knots expanded to parterres with a greater diversity of planting and elaboration of design, adorned with topiary. Stone urns and vases were planted up with tender architectural plants such as aloes or agaves, housed under cover for the winter. The eighteenth century saw the coming of "natural gardening" with broad undulating grassland, lakes, bridges and clumps of trees framing the views. Flowers were thought to detract from the purity of the scene and were exiled to the walled garden, among the fruit and vegetables. The nineteenth century gave us the swing back to formality in the grand style with canals, fountains, statuary and the gradual return of hardy herbaceous plants and the grand herbaceous border.

As well as indicating the main flowering plants appropriate to each period, the authors also tell us what trees and shrubs and fruits were available. I suppose the main message of this book is to stress the importance of the quest for authenticity in any planting schemes for period gardens. It was about 1950 when gardeners began to show an interest in garden history and at that time the emphasis was on layout, garden design and hardware - the bones of the garden. Plantsmen wanted to clothe these bones with beautiful plants, trees and shrubs and this book pays tribute to the National Council for the Conservation of Plants and Gardens, which has done such valuable work in making the public aware of the importance of preserving the greatest diversity of good garden plants.

The main core of the book - about 200 pages - is devoted to the alphabetical listing of the main plant genera, many of which contain endangered species. There is a lot of carefully researched work here which would otherwise be difficult to track down, and for the professional garden architect or landscape contractor, it is a must. But it is also a useful reference book for the more dedicated plantsman, containing many snippets of information to store in one's memory-bank: Candy was the ancient name of Crete, and it was from there that the sixteenth-century John Gerard first got seeds of *Iberis umbellata* and the resultant plants he called "candytuft". *Alchemilla mollis* came from Turkey 115 years ago - a large and splendid thing which one could not have enough of until one found nothing else. *Centaurea ragusina*, my favourite herbaceous "silver" is hardly ever



mentioned nowadays in books or catalogues, but it is here applauded as the eighteenth-century introduction which became the most important "silver" of the nineteenth century. It was replaced in this century by the much hardier *Cineraria maritima* whose impact is, in my opinion, much more subdued.

The 52 colour plates are all good, many are very good and some are excellent, as indeed are the many black and white reproductions. There is a short but interesting chapter at the end giving little potted histories of people mentioned in the text, e.g. Bowles, Clusius, Dioscorides, Gerard, Parkinson, etc - a nice touch! I think my only real complaint is about the poor index, which is a great pity. The only plants listed are those from Chapter 4, and as they appear alphabetically in the text, are easily retrieved anyway, even without an index. Chapters 1, 2 and 3, however, which contain many lists of roses, trees and shrubs, are not picked up at all. I think any gardener remotely interested in the history of plants and gardens would enjoy having this book, and use it often.

Molly Sanderson

J. HARVEY. *Restoring period gardens from the Middle Ages to Georgian times*. 1988. Shire Garden History No. 1. Shire Publications Ltd., Aylesbury. ISBN 0-85263-952-X. UK£3.50.

Dr Harvey is one of the foremost garden historians with an encyclopedic knowledge of gardens from medieval times to the more recent past. His slim volume on restoration of gardens to the Georgian period is therefore imbued with careful scholarship, stressing that as well as being mindful of the archaeology of each garden, and all surviving documents (including maps) when undertaking a restoration, only those plants appropriate to the relevant periods should be considered suitable for any planting scheme. This may seem like an obvious statement, but how many times have gardens been restored with the wrong plants? A simple example of inappropriate planting would be an avenue of Irish yew in a restored sixteenth century garden. To this end, the list of plants with their dates of introduction which is appended to this book is more than valuable. There is a subsidiary list of roses cultivated before 1830 (again with dates). A further caveat however is needed for Irish restorers - dates of introduction into English gardens do not necessarily correspond to the dates for Ireland. This excellent book, both readable and informative, should be on the shelves of anyone concerned with garden restoration and garden history.

E.C. Nelson

Miles HADFIELD. *The English landscape garden*. Shire Garden History, No. 3. 2nd edition. 1988. pp. 72. ISBN 0-85263-919-8. UK£3.50.

The Shire Natural History series offers some thirty attractively-presented booklets, each on a species or group of species of animal or plant found in these islands, and the same publisher has followed this with a Garden History series, of which *The English landscape garden* is number 3. The late Miles Hadfield sets out to explain in simple and readable form how the fluid, natural lines of the eighteenth-century English landscape garden came to sweep away the rigidly-geometric patterns of the formal garden, and how the great practitioners of the art have continued to influence British garden design down to the present day.

The booklet is well-illustrated, with an index. It serves as a useful introduction for a reader unacquainted with the history of English gardening.

Mary Davies

A.M. CLEVELY. *The Integrated Garden*. 1988. pp. 192; illustrated. London: Barrie & Jenkins. ISBN 0-7126-2070-2. UK£16.95.

Most of us, I suspect, have been brought up to believe that flowers grow in a flower garden, vegetables in the vegetable patch, fruit in a fruit cage and herbs as near the kitchen door as we can manage. In this book Mr Clevely stands these deeply-ingrained ideas on their heads and gives us a view of an 'alternative' kind of garden in which clematis and cabbages mix and mingle, while tarragon flourishes under a fan-trained cherry tree. It is a vision of beauty and plenty in which Villandry and the old cottage garden have come together, and onions are interplanted with red lettuce under a standard gooseberry.

In order to make this dream come true the book is divided into three main sections on fruit, herbs and vegetables. There is a mass of tightly-packed practical information here, including all the usual cultural instructions - bearing in mind that the author is an organic gardener - and also the ornamental value of all herbs and fruit and as many vegetables as possible, along with lists of cultivars, a large percentage of which were new to me and presumably are obtainable from the suppliers' index thoughtfully provided at the back. My only quibble here is with the very close planting distances given in the vegetable section which could lead to outbreaks of mildews and botrytis, especially in the Irish climate. There is plenty of advice on the pruning, training and propagation of fruit, illustrated by little coloured drawings, which



are pretty but not very helpful. No one should attempt budding and grafting from a picture three inches square!

Although the integrated garden is supposed to accommodate flowers, they seem somewhat discriminated against and only mentioned in passing, and are usually described in the photographs as simply 'flowers'.

At the back of the book we are provided with a glossary, which unfortunately did not help me with an 'arcure' or a 'step-over-espalier'. There is also a 'Greenfingers' section dealing with tools, pests and diseases, compost, cold frames, forcing etc. By now we are all a bit confused by a rather indigestible mass of instructions and have totally lost sight of our beautiful integrated garden among stool beds and seed trays.

In as much as there are no practical guidelines as to how to lay out our integrated garden, so the book itself lacks an overall plan and design. It seems aimed at everyone and tries to cover everything. Some ravishing colour plates, many of Rosemary Verey's garden - including the front of the dust jacket - show such a garden can be achieved, but here The Expert has been at work, backed up by a professional staff. To achieve such perfection is neither cheap nor labour-saving. Nevertheless there are many ideas here that could be incorporated into our gardens, no matter how small, and it is a pity that this book may not encourage people to try them out.

Megan Morris

C. PHILIP (compiler) and Tony LORD (editor). *The plant finder*. Third edition. 1989. Hardy Plant Society, Whitbourne. ISBN 0-86190-249-1. UK£8.95 (paperback); £12.95 (hardback).

If you have not heard of *The plant finder* yet, I can only suppose you have been living for the last three years on the Blaskets or perhaps Antarctica. It is a phenomenon, now in its third edition and still selling handsomely. The new edition has 40,000 plant names in it which, when synonyms are subtracted, means about 38,000 different garden plants can be sought - and found! - using it. It would be churlish to pick holes in such a work, and there are very few holes to be found; Tony Lord has done an admirable job in trying to wend his way through the quagmire that oft besets cultivar names. The only terrible mistake (one likely to cause war in heaven?) is to place a Waterford nursery on one of the remotest of remote peninsulas in County Cork! That signals the fact that three nurseries in the Republic are included - and surely we can do better than that?

Those who already know the work will definitely need this new edition; those returned from the Blaskets are in for a pleasant surprise! I do pray that Philip and Lord continue this indispensable service for many years to come.

E.C. Nelson

Roy LANCASTER. *Garden plants for connoisseurs*. 1987. pp.192; illustrated. London:Unwin Hyman. ISBN 0-04-440054-3. UK£14.95.

Roy Lancaster is so well-known, and his writings invariably of outstanding value, that it is hardly necessary to recommend this book. The beautiful glowing cover, featuring the hardy orchid *Bletilla striata* is mouth-watering, and inside are other gems. The photographs include many taken in Ireland making this, *inter alia*, a work of importance for historians of Irish gardens - my favourite clump of *Rodgersia pinnata* at Mount Stewart is here; thence also came *Ballota pseudodictamnus* (beneath a dodo! a fun portrait) and *Cistus populifolius*. *Lapageria rosea* dripping with soft Irish rain was 'snapped' at Caragh Lough; *Ozothamnus rosmarinifolius*, *Leycesteria crocothyros* and the now deceased, but immensely beautiful tree of *Cornus controversa* 'Variegata' all hail from Dunloe Castle, County Kerry. The selection is not too eclectic - there are 'common' plants here (*Viola* 'Jackanapes' for example) but all of uncommon beauty - and anyone seeking to form a true connoisseur's collection would be hard put to dismiss any of Roy's plants. I will only quibble about a plant called herein *Zauschneria californica* 'Glasnevin', not for his choice but for the wrong name - it is, as I have pointed out several times, not 'Glasnevin' but 'Dublin', and of course now also should be *Epilobium canum*. But that is a small point of correction, and need not detract from the delightful pictures, excellent text, and impeccable selection. Do read this lovely book, and then grow at least some of the plants 'to feed thy soul'.

E.C. Nelson

L.J. METCALF. *The cultivation of New Zealand trees and shrubs*. Third edition. 1987. pp.346; illustrated. Reed Methuen, Auckland. ISBN 0-474-00059-1.

New Zealand plants thrive in Irish gardens, and most of the books available to us in the northern hemisphere do not deal comprehensively with them. This work by the Director of Parks in Invercargill, Laurie Metcalf, is outstanding,



covering all the native species of trees and shrubs and all the cultivars known to the author.

As I know from my recent visit to New Zealand, there are many plants (species and cultivars) available in that country which have not yet filtered to the north. Some perhaps would be best left in their native land, but many more would certainly merit trials here. This book should whet appetites. The layout of this manual is excellent; each species is introduced by paragraphs which provide information about horticultural history and garden potential, and there follows a full botanical description with the species' distribution. Cultivars are treated in detail too. Many of the taxa are illustrated with black-and-white photographs or by drawings, and there are some colour plates.

There is an appendix listing botanical names with the species' authorities and bibliographic sources; herein Mr Metcalf also lists cultivar epithets but deviates from standard practices by giving authorities for cultivar epithets and unfortunately contravenes rules through the use of both "cv." and single quotation marks (the *International Code* permits one or other form, not both - thus *Sophora tetralix* cv. 'Gnome' is incorrect). He also employs terms such as "comb. nov." and "nom. nud." when cultivar names are transferred from one taxa to another; this is also not in accord with the *International Code*.

Such pedantic criticisms are of minor import to gardeners, and should not in any way detract from the value of this book, which I thoroughly commend to all Irish gardeners who admire and cultivate plants from New Zealand. Ireland's gardens owe so much to the exotica of New Zealand that I hope many members of the Irish Garden Plant Society will obtain Laurie Metcalf's encyclopaedia and benefit from it. They will, incidentally, notice a number of cultivars of Irish origin, e.g. *Hebe* 'Autumn Glory', *Pittosporum tenuifolium* 'Silver Queen' (wrongly attributed to England!) among the roll of horticultural delights.

E.C. Nelson

Roger PHILLIPS and Martyn RIX. *Shrubs*. 1989. pp. 288; illustrated. London: Pan. ISBN 0-330-30258-2. UK£12.95.

*Shrubs* is the latest in the Pan garden plants series. It is described on the back cover as 'the indispensable new reference book for every gardener'. I would add to that, any professional in the nursery or garden centre trade.

There are some 1900 shrubs illustrated in this volume, many of which were photographed in the wild, others in gardens and parks and the

remainder in a studio. The plants are arranged in their flowering season from winter to autumn with additional sections on berried plants and those providing autumn colour. It includes all the common genera such as *Deutzia*, *Philadelphus*, *Cotoneaster* and *Hydrangea* and many special interest plants such as *Hamamelis*, *Rhododendron* and *Magnolia* and tender shrubs. Roses are omitted; they have already been documented in a separate volume in this series. While most plants in this book fall into the category of shrubs, some small trees such as *Styrax*, *Halesia* and *Stuartia* are included, as well as a selection of climbers and vines. Short entries give descriptive details of the plant and its cultural requirements. A guideline of the plant's ability to withstand low temperatures is also included. This is based on experience in southern England and on a literature review. However in my opinion these figures are exaggerated especially for Irish gardens. I doubt if *Gevuina avellana* would withstand temperatures of -10°C.

The identification of cultivars can be very difficult. Photographs can help and I found the book to be particularly useful in this regard. There are, for example, many cultivars of *Euonymus japonicus* and *E. fortunei* available in the trade and while there are descriptions in Bean's *Trees and shrubs hardy in the British Isles*, the photographs in this book provide additional assistance in identifying 'unknown' cultivars.

No matter how often one visits gardens, reads books or catalogues, examines photographs or illustrations, there is always something new to learn about trees and shrubs. This book brought to my attention *Pernettya*-like fruits on *Azara lanceolata*. *Disanthus cercidifolius* and *Edgeworthia chrysantha* look most attractive in flower. Many species uncommon or at least unknown to the reviewer are also illustrated: *Stauntonia hexaphylla*, a climber native to Japan (yet named for an Irishman!) and two shrubs, *Reevesia pubescens* and *Simmondsia chinensis*, all of which are said to withstand low temperatures and from their descriptions deserve to be more widely planted. There are several species that grow very well in this country which are not included in the book, indicating the differences in the cultivated flora of Ireland and Britain. Some *Clethra* species are described but not *C. arborea*, which seeds itself at Rosdohan, Co. Kerry. *Eleutherococcus* (syn. *Acanthopanax*) is represented in several Irish gardens, where it forms attractive evergreen shrubs. *Acradenia frankliniae* is also common in well-sheltered gardens. *Melaleuca* and *Hakea* are omitted from the southern hemisphere shrubs.

This is an excellent book, one to refer to over and over again, a book to browse through when



selecting new plants for the garden or reach for with haste when confronted with an 'unidentifiable' specimen.

Mary Forrest

Hazel LE ROUGETEL. *A heritage of roses*. 1988. pp. 176; illustrated. London: Unwin Hyman. ISBN 0-04-440226-0. UK£14.95.

This is a book to please all lovers of old roses and to win new converts to the cause. Interest in the old shrub roses has been gathering momentum for well over thirty years, since the publication of Graham Stuart Thomas' pioneering work *Old shrub roses*. At that time - 1955 - these sadly neglected and forgotten plants were in need of a champion. Their cultivation and care was the preserve of a very few gardening connoisseurs and indeed many of the roses raised over previous centuries had been lost. Fortunately for our gardens the situation is now different and these shrubs are cherished for the good garden plants that they are. Their charm, fragrance, beauty and colour range are justly recognised and valued by an ever-increasing number of discerning gardeners so that, as Hazel le Rougetel points out, 'Roses of the past have become roses of the present'.

The rose, it is remarked in the introduction, is a much-travelled flower. The same may be said of the author, who over many years has journeyed around the world visiting rose gardens and collections and meeting fellow enthusiasts. She has researched at length and exchanged views with widely-dispersed rose growers from China to America and from Britain to the Antipodes. Books, old nursery catalogues, garden magazines and correspondence have been culled for information on the movement of roses, their cultivation and distribution in many countries over the past three centuries. The result is an absorbing and very personal account, a pot pourri of random gleanings from research, travel, thought and gardening during a busy life.

*A heritage of roses* is much more than a history of these plants. There is wise advice on cultivation and propagation and in particular on planting schemes. The author is quite conversant with the great collections of old roses assembled at Castle Howard and Mottisfont and her keen eye for plant groupings and associations has noted the many successful combinations of plants in these two outstanding gardens.

The book is delightfully illustrated. Two pictures of *Rosa helenae* growing through *Prunus pissardii*, one taken at mid-summer and one in late autumn, indicate what pleasure such a simple combination can provide throughout the changing

seasons. Here is a worthy addition to the growing library of books on old roses. The author's enthusiasm and knowledge will gather more gardeners to the cause.

Jim Reynolds

Heather ANGEL. *A view from a window*. 1988. illustrated. London: Unwin Hyman. ISBN 0-04-440130-2. UK£14.95.

The idea for this book, the author informs us, germinated in China and later reached fruition in England - a familiar horticultural progression. The concept is a fascinating one and a glance at the superb photographs from Kunming gives the reader an inkling of the visual excitement that brought about this inspiration.

There are sixty-three colour illustrations all excellently reproduced and embodied in a most pleasing design. Most are full page and only three are spread across the fold. The typeface is clear and invites one to read the text, a real achievement in such a pictorial work. Being the work of one photographer, the pictures demonstrate a harmony of style that skilfully links illustrations of gardens in three continents. (The Irish representatives are Heywood, Glasnevin (carpet bedding) and the Japanese Garden at Tully). A comprehensive bibliography is another valuable feature of the work.

My initial reaction was that the author had placed too narrow a restriction upon herself; some pictures do not necessarily imply a window viewpoint whilst in others the "window" chosen is that of some natural formation. I must stress that this was my first impression, for the more I study the book the more I enjoy the pictures. Many of these are really superb, simply beautiful to look at, they go further than superficial artistry. I have never seen a more romantically emotive photograph of our own Japanese Garden at Tully (p. 122), similarly, the illustration of a view through a Gothic window at Donnington Grove (p. 81) captures a sense of tranquillity and light which for many is the essence of a fine garden layout. Others picture depth, simplicity and the simply amazing, such as the purple, grey and white parterre of painted gravel and dwarf box, *Buxus sempervirens* 'Suffruticosa' - a design by Tim Rees in the style of a modern painting (p. 63). One is tempted to wax eloquent on so many fine images which capture the eye, stimulate the brain and stir the heart.

So the pictures are good, what of the text? Whereas I found the introduction a little protracted, the main text is quite fascinating. Despite frequent descriptions of features not shown in the pictures, the text accompanying each



photograph is most informative, well researched and does bear out the visual content. Not a book on gardening practice, it would certainly lift the spirits in a season such as that of 1988. The mix of detail on microclimate and the most significant aspects of each location, whether the design, the plants cultivated, or historical information, is blended to form a most readable work.

Heather Angel has earned a much-deserved reputation as a photographer of natural history subjects. This is altogether a delightful book and for such good colour printing, a bargain at the price.

David H. Davison

J.B. TANKARD and M.R. VAN VALKENBURGH. *Gertrude Jekyll: a vision of garden and wood*. 1989. London. 000 pp; illustrated. ISBN 0-7195-4693-1. UK£20.

This is a fascinating book about a fascinating character - landscape painter, craftsman, garden designer, horticulturist, writer and photographer. A book about a highly talented individual, with so many interests throughout her long life, it has an appeal far beyond its title.

The principal interest, of course, must be the wonderful collection of 84 photographs, all by Jekyll, who started photography in 1885, and many hitherto unpublished. They are divided into four sections, the largest comprising those of her own garden at Munstead Wood in Surrey; these date from 1888-1914. There is a small section showing some of her early interests in craftwork and a section entitled 'Portraits'; all these studies, except one, were included in her book *Children and gardens* (1908). The collection of 'Photographic Studies' is extremely interesting, being of some other contemporary gardens, several featuring local examples of stonework and building design, also of craftsmen at work. She was a committed conservationist who set out to record vanishing rural arts and landscapes. All the photographs were selected from Jekyll's photo-notebooks. A unique collection, they are excellently reproduced and give a great sense of period.

Turning to the text, 'The Seasons of Munstead Wood' by Judith B. Tankard describes the house designed by Lutyens for that specific setting (Jekyll's own love for it is very evident), and then details the various gardens, i.e. The Hidden Garden, The Primrose Garden, etc. Munstead Wood was the first major design collaboration between Jekyll and Lutyens and many of the details used here were later incorporated in subsequent projects. This section concludes with a marvellous map-plan of the gardens and buildings and doubly

marvellous is a numbering system on the map which corresponds to the numbered photographs in the book, plus an arrow indicating the photographer's vantage point.

Yet another section by Michael R. Van Valkenburgh and Carol Doyle Van Valkenburgh, is an essay on Jekyll's design philosophy and gives much food for thought, for example, the 'intriguing question' of whether a patchwork quilt served as inspiration for an herbaceous border, the description of her famous Main Flower Border where she attempted to represent the full range of the colour spectrum, or the description of Jekyll walking through the orange borders and stopping to look into the Grey Garden which contained blue flowers and grey foliage plants.

This filling with the strong, rich colouring has the natural effect of making the eye eagerly desirous for the complimentary colour, so that, standing by the inner Yew arch and suddenly turning to look into the Grey Garden, the effect is surprisingly - quite astonishingly - luminous and refreshing. (from *Colour in the flower garden* by G. Jekyll).

One could go on and on. At the back there are notes about the photography, an extensive bibliography, caption notes and sources, notes to text, and an index. I found this a very interesting and rewarding book, my only criticism being its format - rather large and square, and uncomfortable to hold.

Maigréad Henley

Roy LANCASTER. *Roy Lancaster Travels in China. A plantsman's paradise*. 1989. pp. 516; illustrated. Antique Collectors' Club. ISBN 1-85149-019-1. UK£29.50.

In the Spring of 1979, Roy Lancaster was invited to be a guest lecturer on a cultural tour to China. After many years of limited access during which travel was not easy for foreigners, China had begun to open in the mid-1970s and tourism was being actively encouraged. Although this particular tour seemed to have little to do with plants, Mr Lancaster accepted at once. Long interested in Chinese plants, as well as the history of their discovery and introduction to the West, this would at last be a chance to visit the country and to make contact.

It cannot be said that Mr Lancaster wasted his opportunity. In 1979 he found himself identifying field crops from speeding bus and train; by the end of 1985 he had made five further trips to China, four as a leader of botanical tours and one as a member of a joint Sino-British



expedition to Cangshan in western Yunnan. In the course of these trips he had, within a relatively short period of time, managed to visit four of the areas whose names are most resonant for those interested in the Western plant hunters in China: Yi-chang (David, Maries, and most especially Henry and Wilson), Da-li (Forrest, Delavay, Kingdon Ward, Rock), Kang-ding (formerly Tachienlu of Rock, Wilson, Potanin), and Peking itself. Not only was he able to see for himself many of horticulture's most beautiful plants growing in the wild, he was also able to bring back specimens and seeds for propagation by botanical gardens and nurserymen.

This book is an account of five years of China-visiting. Using his six trips to provide a basic framework, Lancaster ranges over travel, geography, history, folklore, ornithology, and, of course, the plants. It is a massive work and to say that it is more than 500 oversized pages long, does not convey accurately the amount of information, of detail, that it actually contains. Here is a fairly representative example of what the reader may expect to learn about a plant (p. 100):

The maple I was most pleased to see, however, was *A. davidii*, named after Armand David, who first found it in the Baoxing (Mupin) district of Sichuan. It was later introduced to England by Charles Maries from the Yichang (Ichang) area of Hubei province but the most important collections were those made by Wilson from Hubei and Sichuan and by George Forrest and Kingdom Ward from Yunnan. On Emei Shan *A. davidii* reached 9-12 m (30-40 ft) with typically striated bark. A small tree in my garden grown from Emei Shan seed has rich red polished young shoots and silver-grey striations on the older wood. It is strong growing and bold foliaged, in character not unlike those found by Forrest in west Yunnan. In cultivation in Britain *A. davidii* is popular and among the best known of the "snakebark" group of maples. It is less common in North America outside of arboreta and botanic gardens. The tallest recorded British specimen is a tree in the Winkworth Arboretum, Surrey, which in 1982 measured 19 m (62 ft).

Such a discussion might also include the use, medicinal or culinary, to which the plant is put in China and, in the case of rare or new forms, the tantalising prospect that, because it is now being propagated, it may eventually become more widely available.

Fortunately this mass of useful information is lightened throughout by the author's sense of humour. Eating his lunch twenty feet above the ground in a sturdy specimen of *Rhododendron sinogrande*, Mr Lancaster muses on the outrage this display of *lèse-majesté* would engender in a head-gardener of the old school. The Chinese await with happy anticipation the British reaction to the news that the soup they have slurped (and crunched) so

enthusiastically was garnished with mummified larvae. Catching his breath during the ascent of the Wudang Shan, the author leans against a handy tree - until the reaction of another member of the party alerts him to the fact that his backrest is *Acer griseum*. Occasionally there is a hint of the physical exertion entailed: The twenty-two mile march from camp 1 to camp 2 on the Cangshan took nine hours. Climbing the Wudang Shan took four hours; the final stage, nine flights of steep steps only deep enough for the ball of the foot.

Mr Lancaster's publishers have done him proud. The text is clear and generously laid out with wide margins. I noticed no typographical errors! The illustrations are numerous and extremely good. Almost all the plant pictures are in colour while the black and white illustrations include many photographs taken by earlier plant hunters. There is a short illustrated biographical dictionary of plant exploration in China, a very useful bibliography, and many - perhaps too many - other indices.

If this book does have a flaw it is that the author has perhaps tried to include too much, especially when he strays into the area of Chinese history (here I noticed several minor errors). Such reservations seem petty when set against the enthusiasm and sense of history the author shows when dealing with his own subjects. The pleasure and interest he took in China, the excitement he felt seeing the haunts of his legendary predecessors, is apparent on every page (as it was apparent in the lecture he gave in Cork in Autumn 1988) and perhaps the more welcome for coming at a time when China's external relations have suddenly again become strained. I think that anyone interested in Chinese plants and their historical associations would find this not only a fascinating book in its own right but an invaluable reference work.

D.T. O Murchadha



The Irish Garden Plant Society was formed in 1981 to assist in the conservation of garden plants, especially those raised in Ireland. It also takes an interest in other aspects of the preservation of Ireland's garden heritage.

This journal will be devoted to papers on the history of Irish garden plants and gardens, the cultivation of plants in Ireland, the taxonomy of garden plants and reports of work carried out by the society and its individual members.

The editorial committee invites contributions from members of the society and others. Please submit manuscripts typed on A4 sheets, double-spaced and typed on only one side of each sheet. Editor: E. Charles Nelson, National Botanic Gardens, Glasnevin, Dublin 9 (to whom copy should be sent); Asst. Editor: Judy Cassells, Department of Plant Science, University College, Cork.

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