

# Heathers 8

Yearbook of The Heather Society 2011

# in memoriam David J. Small

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ISSN 0440-5757

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Arboretum des Grandes Bruyères, Ingrannes, France (see pp 16–19). Winter-flowering heathers match wonderfully with the Chinese magnolia in early spring when the trees and plants are still bare (B. de la Rochefoucauld).

# David J. Small (1939-2010)

# Honorary Member 2009 President of The Heather Society 2000–2010 Chairman of Council 1992–2000



David Small at Yachats, Oregon, USA, 2002 (photograph by Barry Wulff).

"An English gentleman, kind, helpful and generous" is but one of many recent comments made about David Small after the news of his untimely death became known, and is a phrase that aptly sums up the character of one of the most poignant losses to the world of heathers of recent years. David, a member of The Heather Society for 45 years, passed away on Thursday, 11 November 2010 after a protracted period of illness, leaving his wife Anne, son Ian, daughter Hazel and six grandchildren. They have our deepest sympathies, and may take comfort in the knowledge that their loss is shared by so many others. There can be no one in The Heather Society today who will not have benefited in some way and at some time from David's dedication, generosity with his time, and his technical expertise. More than anyone he facilitated the Society's move into the computer age, spending many hours travelling around the country helping fellow Council members with their computer problems. He will be very greatly missed in so many ways.

David was born on 8 December 1939, the son of Bert and Irene Small of Eltham, London. With war having broken out in Europe this was a most dangerous time to be in London, and his life was in fact almost ended at the age of four, when in the November of 1944 a V2 rocket struck near his home, killing seven neighbours. Fortunately David and the rest of his family survived, and they left London for safer climes, temporarily settling in Wilmslow in Cheshire. After returning to London at the end of the war, David attended Shooters Hill Grammar School where he was a bright pupil, excelling in his studies and clearly destined for a career in science. He left school in 1959 to join British Telecom (BT), embarking on a Higher National Diploma course at Woolwich Polytechnic (now the University of Greenwich), and qualifying as a Chartered Electrical Engineer two years later. At BT David rose through the ranks, becoming an expert in printed circuit board manufacture, and eventually being placed in charge of manufacturing research at the Martlesham Heath BT research station near Ipswich. He even ventured into academia, as a lecturer in electronics for the Open University.

Tennis was one of David's favourite sports, and it was at a tennis evening class that he first met his wife-to-be Anne. They were married in 1961 and their son Ian was born in 1962. Their daughter Hazel came along in 1965, by which time they had set up home in Tonbridge, Kent. Their newly built Tonbridge bungalow came with a garden that was essentially a blank canvas, and although this spurred David to become something of an overnight landscape gardener, he admitted that his horticultural priorities were to establish a labour-saving garden as economically as possible. To this end he bought 25 heather plants and took cuttings from them, with the idea of propagating enough to fill the garden. However, his first attempts at propagation were disappointing. Typical of David,



David and Anne Small (standing centre and right) at the Cape Heath Party, Hindhead, 7 April 1973. (See *Heathers* 2: 38 (2005) for full list of those present. Photograph by courtesy of Ron Cleevely.)



David and Anne Small (right) with (from left) Anna Biermann, Graham Thompson (Managing Director, United Distillers) and Norrie Robertson (Head Gardener, Cherrybank Garden) on the occasion of the naming of *Erica carnea* 'Bell's Extra Special' (Whisky) at Cherrybank Garden in 1993 (photograph by Kurt Kramer).

he was undaunted and proceeded to use his technical expertise to tackle the problem, building himself a highly successful mist propagation unit. In March 1966 he joined The Heather Society, admitting later that this was principally in the hope of obtaining cheaper heather plants. However, as one might expect David was soon caught up in the enthusiasm of other members and threw himself whole heartedly into the propagation and cultivation of heathers. At his first AGM he was interested to note that the Society's Secretary, Mrs Constance MacLeod, was wearing a sprig of an unusual heather in her buttonhole, which turned out to be the South African Erica speciosa. At the end of the meeting David asked to be given the buttonhole, which he took home and successfully rooted in his mist unit – a not inconsiderable achievement. At the next AGM he reported his success, and was asked by other members to root Cape heaths for them. Eventually David decided that as so many people seemed to be interested in obtaining rooted cuttings of heathers he would start producing them commercially and so he and Anne set up Denbeigh Heather Nurseries in 1972, the same year that David was elected to Council. The nursery was a part-time venture, and the decision to restrict production exclusively to the provision of rooted cuttings was, in Anne's own words, "simply because they took up less room than plants". In the first year the nursery only propagated about 25 different Cape heaths, but thereafter it expanded to include an increasingly wide range of hardy heaths. The nursery took its name from Denbeigh Field on which their bungalow was built, and when



David Small in the field: left with Dr Ted Oliver at Table Mountain, South Africa, in 1999 (photograph by Barry Wulff) and (right) in Cornwall with Anne and Ros Cleevely near Goonhilly, The Lizard, Cornwall, June 1999 (photograph by Ron Cleevely).

David and Anne moved to Suffolk some two years later, they took the Denbeigh name with them.

In 1990, at the age of 50, David took early retirement from his position as Head of Group at British Telecom in order to be able to dedicate more of his time to the nursery, which then became a full time business selling both to the public and to the trade. At its height, the nursery was producing around 200,000 heather cuttings per year, representing about a thousand different cultivars.

David was also a skilled plant hunter, and went on various heather hunting expeditions abroad. He collaborated on several scientific expeditions to chart and describe various species. Using his technical skills he built a portable version of his propagation unit that could be installed in his car and used in the field, and in combination with his undoubted collecting acumen this ensured that several rare and interesting heathers, including especially *Erica andevalensis*, were brought into cultivation. The list of heather varieties that David was directly or indirectly instrumental in introducing to cultivation is given elsewhere (see p. 9–12); suffice it to say that many of these will be immediately recognized by heather enthusiasts.

David's contribution to the Society and to heathers in general has been prodigious and cannot be overstated. He was elected to Council in 1972, becoming a founder member of the Technical Committee in 1975, and taking on the job of Slide Librarian in 1982. After a further ten years of dedicated service he was fittingly elected chairman of the Society's council, an office he was to hold for eight years before his election as President. During his chairmanship, he and Anne compiled and edited, and then David printed *Handy guide to heathers*; the



David Small (President of The Heather Society) with Professor John Griffiths at Aviemore, Scotland, in August 2004 (photograph by David Plumridge).

first edition was published in 1992 (it was updated and augmented twice, in 1998 (second edition), and again in 2001 (third edition)). This was a major undertaking and one that also paved the way for publication of the *International Register of heather names*. This important project, which was initiated in 1970 by David McClintock, came to fruition between 2000 and 2005, thanks to the dedication of David Small and Charles Nelson. As with the three editions of the *Handy guide*, all the copies of the *International register* were printed at Denbeigh; only the binding was done by a commercial publisher. David was also instrumental in the publication of the Society's two booklets *Recommended heathers*, and *Everyone can grow heathers*, and wrote numerous articles for the Society's *Yearbooks* as well as *Amateur gardening*. (For a comprehensive bibliography see pp 6-9.)

David also set up The Heather Society's impressive website with the able assistance of his son Ian, providing a visually striking and user-friendly mine of information on heathers that was justly awarded a five-star accolade in the *Good Web Guide*.

In his role as President he continued to work unstintingly for the Society, assisting with the design, editing and typesetting of its publications and maintaining the website, and the year 2008 saw a particularly significant achievement with the publication of the outstanding book *Gardening with hardy heathers*, co-authored by David and Ella May Wulff. On account of their book, both authors were elected honorary members of The Heather Society in 2009.

In 1999, an exceptional clone of *Erica umbellata*, found during the 1982 expedition by David, David McClintock and Charles Nelson to Spain, was,

unbeknown to David, formally registered as 'David Small' in grateful recognition of his services to the Society (see *Yearbook of The Heather Society* **1999**: 10; — **2001**: iv). At the same time, a white clone of the species was named 'Anne Small' in similar recognition of Anne's dedicated service as Administrator. The registration certificates for these heathers were presented to a very surprised and delighted David and Anne by David McClintock at the 1999 Annual Conference at Falmouth (see Yearbook of The Heather Society **2000**: 98).

David has passed on, but we will always have his heather to remember him by, and we know that this would certainly meet with his approval.

DAPHNE EVERETT Vice-president, The Heather Society

JOHN GRIFFITHS President, The Heather Society

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1975. Letter to the editor [Use of phosphoric acid]. Yearbook of The Heather Society 2 (4): 35-36.

1976. Our experiences of using mist equipment. Yearbook of The Heather Society 2 (5): 23–24.

1976. A review of mist propagation equipment. Yearbook of The Heather Society 2 (5): 25–26.

1976. Poor mixed-up [Calluna vulgaris] 'Rosalind'. Yearbook of The Heather Society 2 (5): 44–45.

1979. The control of *Phytophthora* and *Rhizoctonia*. Yearbook of The Heather Society 2 (8): 30–33.

1979. [with SMALL, A.] Visit to Milton Hutchings Nursery. Bulletin 2 (16): 5–6.

1982. Free cultivar enquiry service. Bulletin 3 (7): 5–6.

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1983. Champagne in Connemara. Bulletin 3 (10): 4–6.

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1987. Heathers. Amateur gardening, 19 December: 11. [Advice on planning.]

1988. The culture of Cape heaths. Yearbook of The Heather Society 3 (6): 44-49.

1988. Hobby plants - winter heathers. Amateur gardening, 27 January: 10. [Good brief pithy summary.]

1988. Heathers. Plants to last. Amateur gardening, 20 February: 13. [Planting advice for winterflowerers.1

1988. Height of colour. Amateur gardening, 19 March: 13. [Tree heaths, picture of Erica australis.]

1988. In shape for summer. *Amateur gardening*, 16 April: 36. [Pruning.]

1988. Daboecias. Amateur gardening, 14 May: 36.

1988. Midsummer Belle. Amateur gardening, 11 June: 9. [Erica cinerea].

1988. New growth, new plants. Amateur gardening, 9 July: 32. [Taking cuttings.]

1988. Spoilt for choice. Amateur gardening, 6 August: 12. [14 Calluna cultivars selected.]

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1988. Cornish delights. Amateur gardening, 3 September: 12. [Erica vagans.]
1988. Southern Stars. Amateur gardening, 29 October: 29. [Cape heaths.]
1988. Heathers suitable for sinks. Amateur gardening, 26 November: 12.
1988. A sporting chance. Amateur gardening, 24 December: 62. [Sports.]
1989. Heathers and heathland. Yearbook of The Heather Society 3 (7): 44–51.
    Report of a one-day symposium at the Linnean Society of London.
1989. The red brigade. Amateur gardening, 22 January: 32. [Winter colourers.]
1989. Going for gold. Amateur gardening, 4 March: 13.
1989. Top spring collection. Amateur gardening, 1 April: 37. [Coloured tips.]
1989. Silver treasure. Amateur gardening, 29 April: 40. [Grey plants.]
1989. Fortunes of chance. Amateur gardening, 27 May: 47 [Érica × darleyensis and E. × veitchii.]
1989. Chance encounters. Amateur gardening, 24 June: 14. [Summer hybrids.]
1989. Dorset belle. Amateur gardening, 22 July: 12. [Dorset heath.]
1989. The Irish enigma. Amateur gardening, 19 August: 34. [Erica mackayiana.]
1989. Better buys. Amateur gardening, 16 September: 14. [Good advice on buying plants.]
1989. Double pleasure. Amateur gardening, 14 October: 15. [The double Calluna cultivars.]
1990. Designed for drought. Amateur gardening, 6 January: 34. [Anticipating water shortages.]
1990. Natural partners. Amateur gardening, 3 February: 34. [Bulbs with heathers.]
1990. Heathers. Old and new. Amateur gardening, 3 March: 35. [New cultivars; 'Amilto' and
    `Kersten'.]
1990. Feeding time. Amateur gardening, 31 March: 36. ["Feeding is not essential".]
1990. Pick a pipe. Amateur gardening, 23 April: 32–33. [How to produce briar pipes.]
1990. A prize from Portugal. Amateur gardening, 26 May: 34 [Erica umbellata.]
1990. Trouble signs. Amateur gardening, 23 June: 32–33. [Pests and diseases.]
1990. Corsican Clusters. Amateur gardening, 21 July: 30. [A witty account of Erica terminalis.]
1990. Bog star. Amateur gardening, 18 August: 30. [Erica tetralix.]
1990. What's new? Amateur gardening, 15 September: 10.
1990. Good sports. Amateur gardening, 13 October: 16. [Sports and reversions.]
1990. Winter bloomers. Amateur gardening, 10 November: 9.
1990. Degrees of hardiness. Amateur gardening, 8 December: 10.
1991. Lucky heath from Portugal. Amateur gardening, 5 January: 8. [Erica lusitanica.]
1991. Old and past it. Amateur gardening, 2 February: 31. [Life spans.]
1991. Spring haircut. Amateur gardening, 2 March: 8. [Pruning.]
1991. Planting time. Amateur gardening, 20 March: 34–35 [Planting.]
1991. Deliberate crosses. Amateur gardening, 27 April: 34. [Including Erica × darleyensis 'Kramers
    Rote' and E. vagans × manipuliflora 'Valerie Griffiths'.]
1991. Trees from Spain. Amateur gardening, 1 June: 41. [Erica australis]
1991. The Watsons. Amateur gardening, 8 July: 41. [Erica × watsonii.]
1991. Cut flowers. Amateur gardening, 10 August: 43.
1991. Cheers. Amateur gardening, 14 September: 36. [Heather wine.]
1991. Short and flat. Amateur gardening, 19 October: 40. [Dwarf plants.]
1991. Winter fragrance. Amateur gardening, 22 November: 37. [Erica × veitchii].
1991. Winter jewels. Amateur gardening, 21 December: 71. [Planning a winter heather garden.]
1992. Good seasonable buys. Amateur gardening, 1 February: 41. [8 Erica carnea, 8 E. × darleyensis, 4
    E. erigena.]
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1992. Last but not least. Amateur gardening, 16 May: 46. [Erica erigena.]

1992. Disappearing belles. Amateur gardening, 26 June: 38. [Erica cinerea.]

1992. New for old. Amateur gardening, 25 July: 35. [Propagation.]

1992. Superstars. Amateur gardening, 29 August: 34. [Calluna 'Dark Star' and 'Red Star'.]

- 1992. Plant now. Amateur gardening, 3 October: 38. [Planting advice.]
- 1992. Indoor varieties. Amateur gardening, 7 November: 43. [Erica gracilis and E. "× hyemalis".]
- 1992. A winter review. Amateur gardening, 12 December: 12. [Erica carnea.]
- 1992. Erica × stuartii 'Pat Turpin'. Yearbook of The Heather Society 3 (10): 37–38.
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- 1993. Best of the bunch. *Amateur gardening*, 23 January: 34. [*Erica* × *darleyensis*.]
- 1993. Choosing and growing heathers. Amateur gardening, 30 January: 25–32.
- 1993. Acid test. Amateur gardening, 27 February: 38. [Checking the acidity of the soil.]
- 1993. Spoilt for choice. Amateur gardening, 3 April: 38. [How best to choose, what, when.]
- 1993. Time for a haircut. *Amateur gardening*, 8 May: 5. [Pruning.]
- 1993. Advice on water and weeds. *Amateur gardening*, 12 June: 34. [Mulches, etc.]
- 1993. Cuttings advice. Amateur gardening, 17 July: 36.
- 1993. Choosing ling. *Amateur gardening*, 21 August: 34. [15 cultivars of *Calluna vulgaris* recommended.]
- 1993. Why not vagans? Amateur gardening, 25 September: 38.
- 1993. Tricks with heathers, *Your garden* (October): 14–15. [Twelve tips with sound advice, and no tricks.]
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- 1993. Twee or not to twee. Amateur gardening, 27 November. [Companion plants.]
- 1993. [Obituary] Elizabeth Anne McClintock. . Bulletin 4 (20): 4.
- 1994. New heather cultivars. Bulletin 5 (1): 6-7.
- 1994. Budding success. Amateur gardening, 15 January: 34. [Bud-flowering heathers.]
- 1994. Good breeding always shows. Amateur gardening, 19 February): 11. [Good new cultivars.]
- 1994. Getting started. *Amateur gardening*, 26 March): 10. [How to choose plants.]
- 1994. Trim time. Amateur gardening, 30 April: 11 [Pruning.]
- 1994. Fungi fighting. Amateur gardening, 4 June: 11. [Calluna more prone to fungal attack than Erica.]
- 1994. It's no dying matter. *Amateur gardening*, 8 July: 12. [More heathers die from drought than from all other problems put together.]
- 1994. A ripe time for cuttings. *Amateur gardening*, 13 August: 12. [Propagation.]
- 1994. Planting time has arrived. Amateur gardening, 17 September: 10.
- 1994. The autumn colour producers. *Amateur gardening*, 2 October: 12. [Praise for double *Calluna* cultivars.]
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2003. Erica 'African Fanfare'. Yearbook of The Heather Society 2003: 54.

2003. Awards of Garden Merit: RHS giveth, taketh. Heather news 26 (1) 13.

2003. More on deer browsing. Heather news 26 (3) 11

2004–2005. [with NELSON, E. C.] *International register of heather names, Volume 2 African species, hybrids and cultivars* (in 4 parts). The Heather Society, Creeting St Mary.

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2004. The Old 804: European heathers naturalized in Oregon. Heathers 1: 27–29.

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Compiled by R. CANOVAN & E.C. NELSON

# Heather cultivars associated with David Small and Denbeigh Heather Nurseries 1972–1999

Denbeigh Heather Nurseries (DHN) was established by Anne and David Small in Tonbridge, Kent, in 1972, and from 1975 was based in Creeting St Mary, Suffolk. Denbeigh Heather Nurseries ceased trading publicly at the end of 1999.

①DHN + date, indicates a plant introduced by Denbeigh Heather Nurseries in the year given.

'African Fanfare' Cape heath (*Erica*); hybrid of uncertain and unknown origin; name registered by David Small in 2002.

'Albert's Gold' E. arborea: sport on 'Alpina' found by Albert S. Turner (Birmingham)

in 1971; ①DHN 1975.

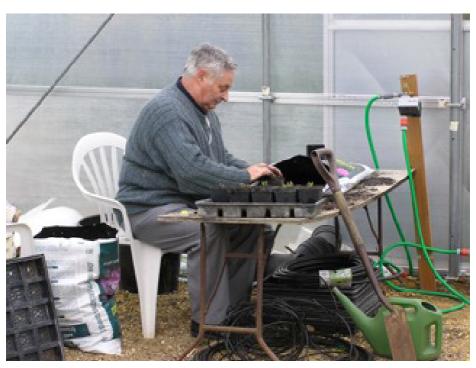
'Aldeburgh' E. manipuliflora: collected from the hedge of Talltrees, Aldeburgh,

Suffolk by David Small; ①DHN 1976.



Erica umbellata 'David Small'

Erica manipuliflora 'Aldeburgh'



Potting cuttings of Cape heaths at Creeting St Mary in June 2004 (© Dr Ted Oliver).





E. multiflora 'Formentor'

E. arborea 'Albert's Gold' (© Daphne Everett)

'Altadena' E. carnea: seedling found by Alan Taylor in his aunt's garden

(Altadena, Crowborough, Sussex) by 1973; ①DHN 1975.

'Anne Small' E. umbellata: seedling raised from seeds collected in Spain from a

white-flowering plant by Dr. Maria Isabel Fraga Vila and sent to

DHN for germination.

'Bell's Extra Special' E. carnea: seedling from open-pollinated 'Myretoun Ruby' raised

by Kurt Kramer (Edewecht-Süddorf, Germany) in 1984; selected by

Kurt Kramer in 1992: ①DHN 1993.

'Brockhill' E. × veitchii: seedling said to have originated at Veitch's Nursery near

Brockhill, Devon; named by David McClintock in 1994; ①DHN. Calluna vulgaris: wild-collected in 1977 at Bridge of Allen, County

'Caleb Threlkeld'

Clare, Ireland by Dr Charles Nelson; ①DHN 1983.

'Clare Carpet' Calluna vulgaris: wild-collected in 1977 at Bridge of Allen, County

Clare, Ireland by Dr Charles Nelson; ①DHN 1983.

'Crowborough Calluna vulgaris: seedling found by A. Taylor (Crowborough,

Beacon' Sussex) about 1971; **①**DHN 1975.

'David Small' E. umbellata: wild-collected in northern Spain by David McClintock,

> David Small, and Dr Charles Nelson in 1982; named after David to mark his outstanding contribution to the work of The Heather Society

and his endeavours in propagating and promoting heathers. 'Delta'

E. tetralix: found by A. Taylor in his garden (Crowborough, Sussex)

in 1970; ①DHN 1976.

'Edith Godbolt' Calluna vulgaris: seedling raised by A. Taylor (Crowborough, Sussex)

in 1972; ①DHN 1975.

'Egdon Heath' E. ciliaris: wild-collected on Hartland Moor, Dorset, by Miss Joyce

Burfitt in 1974; ①DHN 1979.

'Formentor' E. multiflora: wild-collected by Anne and David Small on the

Formentor Peninsula, Mallorca, Spain in 1984; ①DHN.

'Galicia' E. mackayana: wild-collected in Galicia, Spain, by David McClintock,

Dr Charles Nelson and David Small in 1982; ①DHN 1990.

'Ghislaine' Cape heath (*Erica*) hybrid: rescued from a nursery in Iver Heath,

Berkshire, in 1994, possibly raised by Milton Hutchings Ltd, Uxbridge, Middlesex, before 1980; DHN 1997 and named after the granddaughter of David and Anne Small. (Photograph: *Heathers* 2:

42. 2005.)

'Godrevy' E. cinerea: wild-collected by David Small at Godrevy Towans,

Cornwall, in 1972; **①**DHN 1979.

'Hamlet Green' Calluna vulgaris: found by Albert Turner (The Hamlet, Hall Green,

Birmingham) in 1972; ①DHN 1978.

'Harry Fulcher' E. cinerea: seedling found by B. G. (Jack) London before 1977 in

his garden at Taverham, Norfolk; introduced by Neil Brummage (Heathwoods Nursery, Norfolk) as 'Eden Valley Improved' in 1978; re-named at Jack London's request and registered by David Small

in 1981.

'Ian Cooper' E. manipuliflora: wild-collected by A. G. Small on Otok Korčula in

Croatia in 1978; registered by David Small in 1986.

'Ice Princess' E. carnea: seedling from 'Snow Queen' deliberately crossed with

'Springwood White' by Kurt Kramer in 1984; selected by Kramer; named and introduced by the British Heather Growers Association; registered by David Small in 1993

registered by David Small in 1993.

'Jack London' E. cinerea: seedling found by B. G. (Jack) London of Taverham, Norfolk,

in 1979; ①DHN 1987.

'Jason Attwater' E. carnea: wild-collected by David Small on the north shore of Lake

Plansee, Austria in 1982; ①DHN 1995.

'Jean Julian' E. × williamsii: wild-collected by Jean Julian at Kynance Cove, The

Lizard, Cornwall, in 1999; registered by David Small in 2001.

'Polra' E. erigena: wild-collected by David Small, Brian Nelson and Charles

Nelson in Mulranny, County Mayo, Ireland, in 1983; selected by

David Small in 2003.

'Red Carpet' Calluna vulgaris: raised by A. Taylor (Crowborough, Sussex); DHN

1975.

'Spanish Lime' E. arborea: wild-collected at Alto de Campou, Spain, by David

McClintock, David Small, and Dr Charles Nelson in 1982; propagated

by DHN.

'Valerie Griffiths' E. × griffithsii: seedling from E. manipuliflora 'Aldeburgh' deliberately

crossed with E. vagans 'Valerie Proudley' by John Griffiths (Garforth, Leeds, West Yorkshire) and raised by John Griffiths in 1983;

①DHN.

'Winter Snow' E. carnea: seedling from 'Snow Queen' deliberately crossed with

'Springwood White' by Kurt Kramer in 1984; selected by Kramer; named and introduced by the British Heather Growers Association;

registered by David Small in 1993.

Compiled by ELLA MAY WULFF; information from The Heather Society's database of cultivars.

# Observations on rooting cuttings

#### **†** DAVID SMALL

Tonbridge, Kent

What happens when a cutting roots? Why do some species root easier than others? Why is it that in some years, cuttings of a species give very poor results while in other years give near 100% yields? Why do cuttings root easier at certain times of the year?

These questions often arise irrespective of what form of propagation we use (we all have our favourite methods). I certainly do not pretend to know the answers; the more I delve into the subject the more complex and fascinating it becomes. Rooting depends upon many inter-related factors and there is only space to discuss one aspect here.

If a microscopic film could be taken of a heather cutting in the process of rooting, you would see that not all heathers root in the same way.

*Erica carnea*: About two weeks after planting a gradual swelling of the whole stem is observed, then after three to four weeks roots always start to form above a nodule (leaf joint). This is contrary to most plants, which root around the edge of the wound (caused by the separation from the mother plant). After about ten weeks, more roots can be observed coming through the callus formed over the nodules. They appear rather weak compared to the other roots which are well developed by this time.

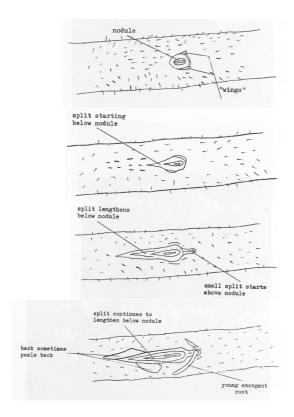
*Erica vagans*: This roots in a similar mode to *E. carnea*. As in all other species examined it does not appear to matter which variety is chosen for study as all cultivars appear to root similarly. I have yet to record an *E. carnea* or *E. vagans* rooting from the base of the cutting.

*Erica cinerea*: This roots by producing a large swelling at the base of the cutting (it does not seem to matter whether it is a tip- or heel-cutting). The time it takes to do this varies considerably. Roots appear two to three weeks later. Thus *E. cinerea* is more conventional in its rooting behaviour, it only rarely roots around nodules which may account for the increased difficulty most propagators have with this species.

*Erica tetralix*: Like *E. cinerea*, it has a distinct preference for behaving conventionally. If anything, swelling seems to be even more pronounced.

*Erica* × *williamsii* 'P. D. Williams': I thought it might be interesting to observe how this hybrid roots as its parents exhibit markedly different modes of rooting. The leaf attachment of 'P. D. Williams' is very similar to *E. vagans*, so

one might expect it to root like *E. vagans*. On the contrary, it exhibits all the same characteristics as *E. tetralix* with only a very occasional weak root appearing from above a nodule.



Calluna vulgaris: Calluna perhaps gives us the clues we seek in establishing how and when rooting occurs. A microscopic film would see that after one to two weeks, the nodules start to swell. Days later a split starts below the nodule. The split increases in length as the nodule swells. The swelling induces splits around the nodule and in particular causes a small split directly above the nodule from which the root emerges. One layer of tissue which a root must rupture is known as the sclerenchyma and probably the root waits for this layer to be split by the swelling nodule before rooting can occur. In time, many roots appear from the splits. Easy splitting and multiple rooting could account for why most propagators find Calluna easy.

There is a marked tendency for the splitting to occur first towards the base of the cutting. On occasions, it is possible to observe all these stages happening simultaneously on one cutting.

Like *Erica carnea* and *E. vagans*, roots appear above each nodule along the length of the stem. Re-observation of the *Erica* species does suggest that 'splitting' may occur but it is by no means very obvious.

One final observation, the stem of cuttings that fail to root, seem to assume a dark colour and when observed under a microscope, appear wizened and dehydrated, the tissue being tough.. There is no other visual indication why the cutting fails to root. It seems as though it is a race between the root piercing this tissue and the tissue becoming too tough.

These observations could offer some explanation to our original questions (and others).

### Juvenility

One of the still rather mysterious factors in plant life, and heathers are no exception, is juvenility. Cuttings from healthy young plants are found to root more readily than from healthy old plants. Hard-pruning often helps to improve juvenility. The common feature here is rapid growth. One possible theory is, therefore, that if the cutting material has seen a rapid growth period the sclerenchyma is probably porous or easily split, thus making rooting easier. This fact could account for why in some years, cuttings are unusually difficult to root and probably follows a period of slow growth of the mother plant due to adverse climatic conditions.

## When to take cuttings

This is rather dependent on the method of propagation employed. In non-mist methods, it is advisable to take the cuttings when the wood is semi-ripe. In this condition, the cutting is rich in stored food (and hence maximum energy can be devoted to rooting) and the sclerenchyma has yet to toughen up beyond a point when the root cannot penetrate it. In mist propagation, however, very young shoots can be taken which have only token resistance to root formation. The danger, of course, is that the cutting is rather limited in food reserves.

Of course, cuttings prefer high light levels and a temperature gradient from the base to the tip of the cutting and these have to be considered in conjunction with the above.

Space necessitates briefness but I would be interested in any comments.

#### Editor's note.

This was David's first substantial contribution to our knowledge of heathers and it remains a valuable series of meticulous observations (reprinted from *Yearbook of The Heather Society* **2** (3). 1974). A version of this, illustrated with the same images, was placed on The Heather Society's website by David. In the on-line version the diagrams were rearranged as here (presumably, the original printed version was erroneous, although no correction seems to have been published).

# Les bruyères à l'Arboretum des Grandes Bruyères

#### BERNARD DE LA ROCHEFOUCAULD

Les Grandes Bruyères, Ingrannes 45450, France

Heathers are the main undershrubs in the Orleans forest, covering the ground in a very attractive way. *Calluna vulgaris* (ling), *Erica cinerea* (bell heather), *E. scoparia* (besom heath), and *E. tetralix* (cross-leaved heath) in the damp places, are quite happy here in this 140,000 acres forest, located 50 miles south of Paris. Many local names are tied to heather, including that of this arboretum. No doubt this was the right place to start a heather collection.

In 1968 we built our house on family land in the forest. We decided to create a landscaped arboretum and botanical conservatory. We were members of the APBF (French association of botanical parks) as well as the International Dendrology Society (IDS), RHS, and the French national horticultural society.

Very soon, in the early 1970s, we visited British parks and arboreta. We discovered the heather gardens, and the heather nurseries. We drove by one of



Les Grandes Bruyères in early April: *Erica carnea* and *E.* × *darleyensis* make a show just before the magnolias are at their peak.

these on a sunny afternoon and were quite surprised by the colouring of all the different varieties we had never seen before. That is how our interest in heather was born.

Then we looked for books about heathers. There was nothing available in France, but in England we discovered: Terry L. Underhill, John F. Letts, Geoffrey Yates, Valerie Proudley, and we were lucky to meet with David McClintock. David became a great friend. He visited us in France and gave us a lot of advice. He persuaded me to write a book about heathers in French, which I did in 1978. Of course, David read all the pages before publishing to make sure everything was correct. We travelled together on IDS tours. We became members of The Heather Society in 1974. In 1997 we wrote a new book with David Small, then Chairman of The Heather Society, and André Dauguet, a French nursery man.

Then we started the collection in a small nursery outside the arboretum. We multiplied the heathers to be planted in the park which covers 22 acres of sandy land with a pH of 6.5, and rainfall averaging 600mm per year. They provided a very attractive basic décor and ground-cover in the arboretum. The heather collection was very comprehensive in the late 1970s.

It was unheard of at that time in France to have a heather garden. The winter-flowering heathers were absolutely unknown. So we started in our nursery to produce them with such success that it enabled us start our arboretum. Of course, the Dutch professionals took over this growing market. Now our national nurseries are all well stocked with heathers.

On 10 January 1985, after a mild autumn and a warm Christmas, the temperature suddenly dropped. In four days it reached –27°C, and lasted two weeks. It was followed in February by –16° for one week; then by four days with –12° in March, and to end it all by –8°C on 24 April. After an 'Irish' climate in autumn, we suddenly were in Siberia, with no snow to cover the bare ground. The River Loire was covered by ice. Two bridges were destroyed by the floating icebergs. After two months the garden was a wreck. An old English friend I called for advice answered: "Put your shears and saws in the cellar and hide the key; now leave the place and come back in June." In June the IDS was expected to visit. We did put the place in order.

The effect of frost on the heather collection in the terrible winter of 1984–1985 was dramatic:

Calluna: no damage at all. Drought is worse than frost for Calluna.

*Erica ciliaris*: all destroyed; no re-growth.

*Erica cinerea*: destroyed except young plants and cuttings.

*Erica erigena*: all destroyed, hardly any re-growth.

Erica tetralix: nearly all destroyed except young plants

Erica vagans: all destroyed except young plants.

*Erica* × *darleyensis*: destroyed except young plants.

*Erica* × *stuartii*: good resistance.



Summer at Les Grandes Bruyères; the yellow foliage belongs to  $\it Erica \times \it darleyensis'$  Jack H. Brummage'



Mid-April, the heathers with Magnolia kobus and M. salicifolia (in the background).



Les Grandes Bruyères in mid-April with heathers and magnolias in flower, but the trees around still have no leaves: quite a sight.

Tree heath Erica arborea 'Alpina': destroyed but vigorous re-growth.

Tree heath Erica lusitanica: destroyed.

Daboecia: excellent resistance.

The Arboretum des Grandes Bruyères today is a vast heather garden, an unusual and attractive site. In April the *Magnolia* collection, which is the French National collection, is enhanced by acres of winter-flowering heathers. In autumn the heath illuminates the grounds with soft colours.

# Heather companions: a gardener's guide

#### **†** Arnold Stow

High Wycombe, Buckinghamshire.

There is nothing to beat a heather garden for wonderful year-round colour, but sometimes the overall effect can be improved by adding a few well-chosen companions to the design.

There are many plants which associate very happily with heathers – for instance:

- A few well chosen trees and shrubs improve the effect of a large heather planting.
- Herbaceous plants add summer colour to a winter heather garden.
- Bulbs give spring interest to a summer heather garden and enhance the spring-flowering display.
- Grasses provide a sense of lightness, airiness and movement.

Companion plants provide extra colour, texture and form when and where they are needed most and this article is designed to help you to choose the most suitable for your own situation.



Hibiscus 'Diana' in The Bannut; all the hardy Hibiscus can be hard-pruned to keep them within bounds. (© Daphne Everett)

#### Trees

Trees, of course, produce shade, and it is well known that heathers need an open sunny situation to give of their best. However, there is little doubt that if your heather garden is fairly large, and especially if it is on a flat site, one or more well-placed trees can add an entirely new dimension to the whole design. Almost any tree may be planted on the north or even the east sides of the garden, without causing too many problems, but more careful consideration must be given to any on the south or the west sides and especially if planted within the heather garden itself.

Birches (*Betula*) are the trees which are most usually associated with heathers in the wild. They are beautiful, elegant trees and are also very suitable for the heather garden as they cast only a light dappled shade in the summer. The dainty foliage of a silver birch, rustling in the breeze, gives a cool airy feeling to the summer garden.

Most birches have good autumn colour and the small leaves won't smother the plants growing beneath them when they fall. However, they do have one disadvantage, which is that the roots, some of which tend to run for some distance at ground-surface level, are very greedy and tend to rob the surrounding area of water and nutrients.



Paper birch in The Bannut. (© Daphne Everett)

Some birches suitable for the larger garden are:

#### Betula

- *B. pendula* (silver birch)  $\Sigma$ : 25 × 10m; narrow conical tree with peeling white bark. Widely available and inexpensive to buy.
- *B. pendula* 'Laciniata' 

  ('Dalecarlica' misapplied) (Swedish birch): 10 × 3m; pendulous branches and deeply cut leaves.
- *B. lenta* (cherry birch): 15 × 12m; dark red bark on young trees, fading to grey.
- *B. papyrifera* (paper birch) : 20 × 10m; beautiful peeling white bark.
- *B. utilis* var. *jacquemontii*:  $18 \times 10$ m; shining white bark; several clones available including 'Grayswood Ghost'  $\mathbf{Z}$ ' and 'Jermyns'  $\mathbf{Z}$ '.

# For the small garden:

- *B. nana* (Arctic or dwarf birch): 0.6 × 1.2m; small spreading tree with finely toothed, glossy leaves.
- 'Trost's Dwarf' :  $1.5 \times 1.5$ m; leaves finely cut on gracefully arching branches.

Varieties of crabapple (*Malus*) and rowan or mountain ash (*Sorbus*) also associate well with heathers. They are very good value for money, providing flowers in spring and bright fruits in autumn. Some examples are:

#### Malus

- 'Golden Hornet'  $\Sigma$ : 10 × 8m; white flowers in spring and in autumn a profusion of golden yellow fruits which last on the tree all through the winter.
- 'John Downie' \( \mathbb{Y} \): 10 × 6m; white flowers in spring, orange and red fruit in autumn.
- 'Red Sentinel' : 7 × 7m; white flowers in spring and glossy red fruits in autumn.

#### Sorbus

- *S. aucuparia* 'Fructo Luteo' \( \sigma \): 8 × 8m; white flowers in spring and yellow berries in autumn.
- *S. cashmiriana*  $\mathfrak{T}$ : 8 × 7m; white flowers in spring, followed by a profusion of white berries.
- *S. vilmorinii*  $\mathfrak{T}: 5 \times 5m$ ; white flowers in spring and in autumn berries that turn from red to pink and then to white.

#### Shrubs

If you have an acid soil, rhododendrons, azaleas, *Pieris* and other ericaceous shrubs might seem obvious choices to associate with heathers. However, most of these do not thrive in the open sunny conditions that heathers enjoy,



Berries on Gaultheria mucronata (syn. Pernettya mucronata), a member of Ericaceae, vary from white to dark red; Egil Sæle's garden, Hellesøy, Norway (© Egil Sæle).

preferring instead areas of cool, dappled shade. If it is possible to provide them with some shade from the hot midday and afternoon sunshine, they can look superb. One of the exceptions to this rule is *Rhododendron yakushimanum* and its many hybrids. *R. yakushimanum* grows naturally on the sunny mountain slopes of Yakushima Island, Japan. It is very hardy, will tolerate full sun and doesn't grow to more than 2 × 2m. There are now many colours to choose from.

*Hebe*: The shrubby speedwells, mainly from New Zealand, are very useful shrubs – they are happy in sun or a little shade and will tolerate both acid and alkaline soils. They range in height from over a metre to as little as 20cm and the colour of their flowers seem to harmonise beautifully with heathers. They are sometimes knocked back in a hard winter but will usually break again from the base. Here is a small selection from the vast range available:

- 'Autumn Glory': 0.6 × 0.9m; small purple-blue flowers from mid-summer until early winter.
- 'Great Orme'  $\Sigma$ : 1.2 × 1.2m; large bright pink flowers over a long period.
- *H. pinguifolia* 'Pagei' **∑** : 0.3 × 0.9m; white flowers on leathery grey-green leaves.
- 'Mrs Winder' \( \mathbb{Y} : 1 \times 1m;\) violet-blue flowers and purple-green leaves; very compact.
- 'Youngii' (syn 'Carl Teschner') :  $0.2 \times 0.6$ m; large violet flowers with white throats, on green foliage.

All these cultivars are hardy in all but the severest winters. Unless you live in a fairly frost-free region, avoid hebes with bright red flowers, very large leaves, or variegated foliage as these are particularly susceptible to cold.

Brooms: Cytisus and Genista grow naturally with heathers in the wild.

- *Cytisus* × *praecox* : 1.2 × 1.5m; compact arching shrub with pale yellow flowers in long racemes, from mid to late spring.
- *Genista tinctoria* (dyer's greenweed) : 0.6 × 1m; upright, deciduous shrub with golden yellow flowers from spring to early summer.

Hibiscus are very useful shrubs among heathers. Not only do they need an open sunny position to flower well, they have tidy, upright growth which doesn't shade the heathers, and they flower late in the season, late summer to mid -autumn, when most other shrubs have finished.

### H. syriacus

- 'Blue Bird': bright blue flowers with red centres.
- 'Lady Stanley' : double white flowers, flushed pink.
- 'Woodbridge' \( \mathbb{Y} \) : rich pink flowers with darker centres.

These all grow to around  $3 \times 2m$ , but can be hard-pruned.

Other shrubs: During the period when neither heaths nor heathers are in flower—in May and June—their ericaceous cousins, *Cassiope, Andromeda* and *Phyllodoce* planted close to the footpaths will adorn the garden with their urnshaped flowers.



Cassiope – one of the "Askival" cultivars (© Allen Hall).

Mention must also be made of the beautiful Japanese maples (*Acer*), with colours, shapes and forms too numerous to mention and spectacular autumn colour. As long as it is not too windy and exposed, there is a maple to suit any size of garden.

#### Conifers

Although the idea of planting conifers with heathers seems to have gone out of fashion in recent years, there is no doubt that they associate well together. There is such a wide range of shapes, sizes and colours among the conifers, that they complement the more gentle contours of the heather plantings very well.

The conifers which associate naturally with heathers in the wild are junipers (*Juniperus*) and pines (*Pinus*) and there are many cultivars of these to choose from. *Thuja* has produced many fine garden plants, both large and small, and the Lawson's cypress (*Chamaecyparis lawsoniana*) is well known for the vast range of shapes, sizes and colours among its many cultivars. There is even a cedar of Lebanon (*Cedrus libani* 'Nana') which only grows to about 5 metres in height and takes many years to get there.

If your garden is a small one, be aware of the difference between dwarf conifers and slow-growing conifers. Many nurseries offer so-called "dwarf" conifers, which can, in ten years or so, reach quite a large size. Some of the true dwarf conifers can be quite expensive as they will have taken the nurseryman several years of tender, loving care just to get them to a saleable size (however, even these will grow to several metres tall during their lifetime). Planting the cheaper, slow-growing types among your heathers, in the knowledge that they will need replacing in a few years time, is fine, as long as you realise in advance what you are buying.

Some conifers suitable for growing among heathers – the sizes quoted are after ten years – include:

*Juniperus* (juniper)

• *J. communis* 'Compressa' : 0.3m; a dainty conical conifer with tight green foliage which looks delightful planted among heathers (or on a rockery, or in a sink-garden); it looks even better if planted in groups of three.





Conifers provide contrasting colours and shapes; (left) Cornish heath with a blue spruce (© E. C. Nelson); (right) *Juniperus communis* 'Compressa' is a dainty, slender juniper (© John Plowman).

- *J. communis* 'Gold Cone' : 1 × 0.2m; a very attractive and useful plant.
- *J. scopulorum* 'Skyrocket' : 2m; its narrow, columnar habit means that it takes up very little room in the heather bed
- *J. squamata* 'Blue Star' : 0.3 × 0.5m; very striking spreading dwarf conifer, with steely blue foliage; needs a situation where it won't be swamped by the taller growing heathers.

# Pinus (pine)

- *P. mugo* 'Mops' : 0.75 × 0.75m; dwarf conifer with bright green leaves and spherical growth.
- *P. parviflora* 'Glauca Nana' : 2–3m; attractive pine with glaucous foliage; good for the larger garden.

## Taxus (yew)

- *T. baccata* 'Fastigiata Aurea' : 2m; golden form of the narrow, columnar Irish yew.
- *T. baccata* 'Standishii' : 0.5m; very attractive miniature version of the previous cultivar.

## Thuja

- *T. orientalis* 'Aurea Nana' : 0.6m; lovely, compact-growing dwarf conifer with flattened sprays of golden foliage.
- *T. orientalis* 'Rosedalis': 0.5m; foliage changes colour throughout the year, purple-brown in winter, bright butter-yellow in spring, turning light green in summer.
- *T. occidentalis* 'Recurva Nana': 0.25–0.3m; low-growing, flat-topped, light green dome, with curiously recurved branchlets.



The centre-piece of this part of The Bannut is *Picea glauca* 'Albertiana Conica' (© Daphne Everett).

## Picea (spruce)

• *P. glauca* 'Albertiana Conica' : 1m; deservedly popular dwarf spruce; forms a dense, bright green cone; susceptible to red spider mite.

## Chamaecyparis

- *C. lawsoniana* 'Ellwoodii' and 'Ellwood's Gold': 1.5–2m; probably the most popular of all the so-called "dwarf" conifers; they make attractive columnar specimen plants, which can be easily replaced if they outgrow their situation.
- *C. lawsoniana* 'Pygmaea Argentea' : 0.2–0.3m; most attractive dwarf conifer with bluish-green foliage, capped with silvery white tips; needs full sun to develop its best colour.
- *C. lawsoniana* 'Minima Glauca' and 'Minima Aurea' : 0.25–0.3m; two outstanding dwarf cultivars with rounded columnar form; 'Minima Glauca' has dense green foliage; 'Minima Aurea' is bright gold.
- *C. pisifera* 'Plumosa Rogersii' : 0.3–0.4m; little broadly conical conifer; benefits from a sheltered position because cold wind tends to burn its golden-yellow foliage.

# Herbaceous plants

Herbaceous plants can be used with heathers with great effect, especially if your garden is on limy soil and the number of summer-flowering heathers you can grow is restricted. Care must be taken to avoid those plants with rampant growth that is hard to control and with leaves that are likely to smother the adjoining heathers.

Cranesbills: one of the most attractive and useful herbaceous plants for almost any situation is the hardy cranesbill (Geranium) which can provide a suitable species for dry shade, damp shade or full sun. Flower colour must of course be taken into consideration and the cranesbills, with their shades of pink, white and cerise, tone well with the various lime-tolerant summer heathers such as  $Erica\ vagans$  (Cornish heath),  $E.\ manipuliflora$  (whorled heath) and  $E.\times griffithsii$  (Griffiths's heath).

#### Geranium

- *G. cinereum*: 0.15 × 0.3m; dwarf, rosette-forming evergreen, with white or pale pink flowers, usually veined purple, in late spring and early summer. It requires a sunny position and well drained soil to give of its best. There are several named cultivars:

  - 'Lawrence Flatman': more vigorous and with a darker flower.
  - subsp.  $subcaulescens \mathfrak{T}$ : brilliant magenta flowers with black centres.
- G. dalmaticum 2: 0.15 × 0.5m; dainty dwarf cranesbill that requires a sunny situation. It has clusters of pale to bright pink flowers with red anthers during the summer, is evergreen except in the most severe of



*Geranium himalayense* 'Irish Blue' is just one of the cranesbills that can be used in association with lime-loving heathers (© E. C. Nelson).

winters and will never outgrow its welcome. There is also a white form.

- *G. himalayense*: 0.3 × 0.6m; a useful plant for a shady situation, producing saucer-shaped violet to mid-blue flowers, touched with reddish-pink, from early summer into early autumn.
  - 'Irish Blue': free-flowering with paler blue flowers.
  - 'Plenum' (syn. 'Birch Double'): purplish-pink, double flowers.
- *G. macrorrhizum*: 0.5 × 0.6m; a semi-evergreen perennial, with clusters of pale pink flowers in early summer. It has attractive seven-lobed leaves which colour well in the autumn and will tolerate areas of dry shade where heathers will not thrive. The plant's spreading, rhizomatous roots mean that it soon creates an effective ground cover, but care must be taken to ensure that it is kept within bounds. There are several named cultivars:
  - 'Bevan's Variety': crimson purple flowers.
  - 'Czakor': magenta flowers and purple tinted foliage in autumn.
  - 'Ingwersen's Variety' \( \bigsiz \): soft pink flowers with glossy green leaves.
- *G. sanguineum* (bloody cranesbill):  $0.2 \times 0.3$ m; this useful plant, with its striking magenta flowers, needs a sunny situation. In recent years many named cultivars have arrived on the market, of which probably the most striking is
  - 'Shepherd's Warning'  $\mathbf{X}$ : deep red-pink flowers.

- *Epimedium*: Another plant which tolerates shady conditions and will not compete too much with heathers is *Epimedium*. These grow between 0.12m and 0.3m tall, according to species, and produce dainty lilac, pink, yellow, white or crimson flowers during the spring. They also have attractive lance-shaped leaves.
- *Armeria maritima* (sea-pink, thrift) : 0.2 × 0.3m; a tidy little evergreen, cushion-forming perennial, with spherical white, pink or red-purple flowers on long stems in early summer.

Some of the dwarfer stonecrops (*Sedum*) associate with heathers quite well.

- *S. heterodontum* (syn. *Rhodiola heterodonta*) : 0.4 × 0.4m: rounded red buds open to star-shaped yellow flowers in late spring and early summer.
- *S. rosea* (syn. *Rhodiola rosea*) : 0.2 × 0.2m; pink buds opening to yellow-green flowers in summer.
- 'Ruby Glow'  $\Sigma$ : 0.25 × 0.40m; star-shaped ruby-red flowers produced from mid-summer to early autumn.
- *Perovskia* 'Blue Spire' \( \frac{\text{\$\mathbb{Z}}}{2}: 1 \times 1m\). This striking, heather-like perennial, which needs a sunny situation, is sometimes described as a sub-shrub. The tubular violet-blue flowers in late summer, are borne on stiff, silverwhite stems, bearing small silver-grey leaves.

Many of the bistorts (*Persicaria*) are too rampant to include, but there are one or two well-behaved species which fit into this section:

*Persicaria affinis* (syn. *Polygonum affine*)

- 'Dimity' :  $0.1 \times 0.45$ m; pink flowers in summer and red leaves in autumn.
- 'Donald Lowndes'  $^{\square}$ : 0.2 × 0.3m; dense spikes of pale pink flowers becoming darker as they mature.

All these plants will provide flower in the spring and summer without swamping their important neighbours, the heathers.

# Alpines

Most alpines require an open, sunny situation and well-drained soil. Some need an acid soil, while others prefer alkaline conditions. Heathers have similar growing requirements (in fact, *Erica carnea* is sometimes known as the alpine heath), so, with a little careful planning, heathers and alpines may be planted to complement each other very well. The main *proviso* is that as many alpines are quite small, care must be taken to make sure they are not swamped by their heather neighbours.

The various *Phyllodoce*, called mountain heaths in North America, appear to be a natural choice to join the heathers, and are the aristocrats amongst the alpines. They need acid soil and benefit from a little shade. The flower colour ranges from white through all the shades of pink.

- *P. caerulea* (blue heath) : 0.15 × 0.3m: an upright shrub with glossy, fine-toothed leaves; purplish pink flowers (despite its name) produced in late spring. A very rare native of Scotland.
- *P. empetriformis*: 0.3 × 0.4m; mat-forming shrub with bell-shaped rosy-red flowers in early summer.
- *P.* × *intermedia* 'Drummondii' : 0.15 × 0.35m; glossy leaves and deep reddish-purple flowers in spring.
- *P. nipponica*  $\mathbb{Z}$ : 0.2 × 0.2m; erect shrub with pendant bell-shaped white, or pink-tinged flowers in early summer.
- Acantholimon glumaceum, also known as the prickly heath, has hard, spiny, evergreen foliage and spikes of starry, clear pink flowers in early summer. It requires good winter drainage.
- *Crepis incana*. Do not be put off by the dandelion-like foliage, the flowers, when they appear on this compact plant in late May, are a lovely soft pink. 0.3 × 0.3m.

*Dianthus* (rock pinks). There are over 300 *Dianthus* species to chose from and if an alkaline soil limits your choice of summer-flowering heathers, they will provide welcome colour in early summer. A small selection is:

- *D. deltoides* (maiden pink)  $2 : 0.2 \times 0.3$ m; mat-forming with white, deep pink or red, single flowers.
- 'Doris' : 0.2 × 0.3m; modern pink with scented, double, pale pink flowers with darker centres.
- 'Monica Wyatt': clove-scented, double with pale lilac flowers.
- 'Mrs Sinkins' :  $0.2 \times 0.2$ m; double white, highly scented flowers.

Another alpine that prefers alkaline soil is *Erodium* – also known as storksbill because the fruits resemble the bill of a stork. Storksbills need a well drained soil in winter.

- *E. chrysanthum* :  $0.15 \times 0.4$ m; umbels of saucer-shaped sulphur-yellow flowers in summer.
- E. glandulosum  $\Sigma$ : 0.2 × 0.2m; compact plant with lilac-pink flowers in summer.
- *E.* × *variabile* 'Flore Pleno': double deep-pink flowers with darker veining, throughout the summer.

The stonecrops (*Sedum*) have already been mentioned in the herbaceous section, but, at just 0.1m in height, *S. rupestre*, with bright star-shaped, golden flowers, is worthy of consideration.



Long-established autumn-flowering cyclamen with spring-flowering heathers: Champs Hill, West Sussex (© E. C. Nelson).

#### Bulbs & corms

In the dark days after Christmas there is no more cheerful sight than that of clumps of dainty snowdrops blooming among the winter- and spring-flowering heathers. Snowdrops (*Galanthus*) are perfect heather companions; their foliage dies down fairly quickly after they have finished flowering, without causing any problems.

Many of the crocuses are equally suitable as companion plants. The yellow flowering crocuses look very well indeed against the pinks, mauves and whites of the winter- and spring-flowering heathers, whereas the purples and whites can be seen to their best advantage among the foliage of the summer-flowering heaths.

Most of the hardy *Crocus* species and hybrids can be used in this way. However, it is probably best to avoid the very dwarf ones; these might have difficulty getting their heads above the heather foliage.

*Narcissus:* clumps of dwarf daffodils among the winter- and summer-flowering heathers also bring a welcome touch of spring.

- *N. pseudonarcissus* (Lent lily, wild daffodil) : 0.2–0.3m; yellow trumpets and cream perianths in early spring.
- 'Jack Snipe': white perianths and lemon-yellow trumpets in spring.



The old, dwarf, double daffodil called 'Rip Van Winkle' (© E. C. Nelson)

- 'Rip Van Winkle': double, greenish yellow petals give a shaggy effect in early spring.
- 'Tête à Tête' \( \vec{\pi} \): 0.15m tall; 1–3 flowers on each stem; yellow perianths and deeper yellow cups.

The taller growing daffodils are not to be recommended as the foliage tends to smother the heathers, and cannot be removed for many weeks without having a detrimental effect on the bulbs.

*Anemone*: the various dwarf species of *Anemone* tend to retreat after flowering in an acceptable manner.

- A. blanda  $2 : 0.12 \times 0.1m$ ; enjoys full sun; blossoms in the spring in many shades of pink, white and blue; there are several named cultivars of this attractive plant.
- A. nemorosa (wood anemone)  $\Sigma$ : 0.08 × 0.3m; grows in sun or part shade, white or pink-flushed flowers in early spring.
- A. sylvestris (snowdrop anemone) :  $0.3 \times 0.3$ m; semi-pendant white flowers in late spring.

*Erythronium* (dog's tooth violet), with its dainty cream and yellow flowers, is also well behaved and enhances the spring garden.

The hardy, spring- and autumn-flowering cyclamen, *Cyclamen coum* and *C. neapolitanum* associate well with both *Erica* and *Calluna*. However, the leaves, although they are only above ground for part of the year, do tend to get larger and denser over the years and can easily smother small heathers if care is not taken. Cyclamen are also perfect for planting beneath shrubs in those shady dry spots where most plants will not grow.

## **Ornamental grasses & sedges**

Ornamental grasses and sedges have become very popular in recent years and there is a wide range of colours and sizes to choose from. Sedges and grasses are natural companions to heathers, as a visit to any heather moorland will show, but care must be taken to select those that do not grow too tall or are invasive. There is no doubt that the sound of grasses gently rustling and the sight of them swaying in the breeze, and of the evening sun shining through the flower heads, give a dimension to the garden that heathers alone can never give. The range is enormous but a small selection is given here.

- *Molinia caerulea* 'Variegata': to 0.5m; a beautiful grass with neat low tufts of delicate bright cream and green striped leaves; flowers appear in July and August and last well into autumn; cut back in early spring.
- *Stipa arundinacea*: to 1m; taller than *Molinia*; long narrow leaves of rich orange-brown, forming fountain-like clumps; foliage deepens in winter and lasts well into the spring when it should be cut back.
- *Stipa tenuissima*: to 0.7m; bright green filamentous leaves with a mass of creamy, feathery flowers from May onwards.



Grasses can be associated with heathers: (left) the variegated purple moor-grass (*Molinia caerulea* 'Variegata') growing in the Kays' garden at Lettergesh, Connemara, Ireland, where the species is a native plant dominating the boglands nearby; (right) the grass-green leaves of the Japanese blood grass *Imperata cylindrica* 'Rubra' turn vivid red in autumn and are striking: use in association with autumn-flowering heathers (© E. C. Nelson).

The fescues (*Festuca*) rarely reach more than 0.25m in height and are an ideal foil to the dwarfer heathers.

- *F. amethystina* 'Aprilgrün' : olive-green leaves and purple tinted flowers.
- *F. eskia* : rich green leaves and flower spikes tinted green, orange and yellow.
- F. glauca:
  - 'Blaufuchs' (Blue fox) \( \mathbb{Y} \): bright blue foliage.
  - 'Seeigel' (SEA URCHIN): a tight bun of blue-green leaves.
- F. valesiaca 'Silbersee' (SILVER SEA): compact plant with pale silvery leaves.

Some of the sedges (*Carex*) can make attractive additions to the heather garden, as long as sufficient space is allowed to accommodate their naturally graceful, arching foliage.

- *C. conica* 'Snowline': to 0.15m; dark green, white-margined leaves and brown-purple flowers.
- *C. elata* 'Aurea' (Bowles's golden sedge) **2**: to 0.7m tall; deciduous, with lovely golden arching foliage.
- *C. oshimensis* 'Evergold' \( \mathbb{Z}' \) : to 0.3m; forms a low mound, of dark green leaves with broad creamy yellow central stripes.

All of these grasses and sedges seed freely, but the seedlings are easily removed if not required.

#### Conclusion

Before deciding on the particular effect for your garden it could be both beneficial, and enjoyable, to take a look at heathers growing in various settings.

The National Collection® of Heathers is grown at the Royal Horticultural Society's Garden at Wisley in Surrey, where the plants were laid out in a more natural setting. Howard's Field, which before the 1987 hurricane was part of the Pinetum, still contains a number of old trees and shrubs, but the heather beds have been carefully sited and the general effect is a most attractive heather garden with a restful ambience.

The Royal Horticultural Society's Garden, Harlow Carr, near Harrogate now has heathers planted as companion plants to shrubs and perennials. (The former reference collection of *Calluna*, in which the plants are set out in a much more scientific fashion to enable them to be easily compared and evaluated by visiting heather enthusiasts, was removed in the late 1990s.)

Golden Acre Park in Leeds has the benefit of a large and attractive heather garden which was sponsored by Harry Ramsden of fish and chip fame.

Cambridge Botanic Gardens has a winter garden, where winter- and springflowering heathers are set among the red- and yellow-stemmed dogwoods (*Cornus* cultivars) and white-stemmed *Rubus*, and the winter colours of the ornamental grasses abound. Wakehurst Place in Sussex vies for a visit during the winter months. In addition to the dogwoods and white-stemmed birches, you will see the blue grass *Festuca glauca* 'Blaufuchs' and the sedge *Carex oshimensis* 'Evergold' complementing the heathers.

The Sir Harold Hillier Arboretum near Romsey in Hampshire has also carried on this theme of heathers and companion plants for winter interest.

There are some smaller, private gardens around the country which are open to the public and where heathers play a part. These gardens vary considerably according to the personalities of their owners and they usually provide interest as well as "food for thought". One of these is the nine acre Great Comp Garden, near Sevenoaks in Kent, where, as well as creating towers and mock ruins from the rock dug up over the years, the late owner Roderick Cameron, created a beautiful garden, part of which is planted with heathers.

The Bannut near Bromyard in Herefordshire has several heathery features, including a heather knot garden. There are two heather gardens covering around a quarter of this 3 acre garden, the older one is laid out in traditional fashion with heathers and conifers, and the more recently planted one has shrubs (*Hebe, Hibiscus, Daphne, Viburnum* and other genera) as companion plants, with silver birches to give added height.

Last, but not least, it is always a pleasure to get out onto the moors to see heathers and their companion plants growing as Nature intended: sometimes heathers under an open canopy of pines or birches; often heathers growing among colourful broom and gorse bushes; and, nearly always heathers growing among the wild grasses.

Wherever you visit, you are bound to enjoy the beautiful gardens and tranquil landscapes, meet friendly people with similar interests, and come away with some good ideas for your own "heather companions".

#### Editor's note

This was originally completed in the early 2000s by Arnold Stow as a contribution to "The world of heathers booklet series", but for a variety of reasons it was never published. The Society's Council decided that the text should be issued in the form of a yearbook article as a tribute to the author's dedication to heathers. Photographs have been selected by the editor who is most grateful to all members who offered images; in the end, the final selection was much more limited than intended because of the restricted space in this issue.

indicates that a plant holds the RHS award of garden merit.

## Short back and side, sir?

#### COLIN ROGERS

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I guess the earliest time to prune *Calluna* is when the flowers no longer please but new autumn growth is not yet in evidence; the latest time should therefore be a judgement about when new spring growth is becoming too vigorous to risk being destroyed. Between those two times, there is a long period during which frost is a possibility – hence there are two short windows of opportunity to prune safely. The first gives the maximum chance for new growth; the second uses frost-damage as an excuse to put off for six months what could easily be done today.

Writers seem to be divided as to the time they prefer. Toogood (1986: 201) prunes annually in the spring, thinking that dead flowers are "often very attractive, turning to shades of brown and buff". Bloom (1985), Jones (1998: 28–29), Yates (1985: 30–31), and Proudley and Proudley (1982: 49) agree, and Small and Wulff (2008: 49–52) emphasize the advantages of spring pruning in cold climates. Johnson (1956: 58–59) would prune in the spring if forced to prune at all. Among these writers, however, there are cautionary words about pruning (or rather trimming as Yates reminds us) spring-foliage cultivars of *Calluna*, with Small and Wulff (2008), van der Laar (1978: 35), and Underhill (1990: 57) advocating autumn pruning for such cultivars as 'Spring Torch' which several including Lambie and Lambie (n.d.) mention by name).

Are these writers correct? Never one to accept the given (being the son of a Thomas) I tried to put the alternative pruning dates to the test – but how should a trial be carried out, in the light of various imponderables? Different cultivars might react in different ways. Plants of the same cultivar might be affected by different environmental conditions – variations in soil, temperature, sunlight and so on. Even parentage might have given some offspring a marginal propensity to weather a harsh winter.

There was only one rational solution, albeit involving the plants' loss of dignity. I decided to prune the western half of each plant of the same cultivar, in the same bed, in the autumn, finishing the eastern side in the spring. Even then, not all beds could be used, as those more than three years old had an overall matted appearance making it too difficult to distinguish individual plants, and the vulnerable – those under two years old – were considered to be "before the watershed" for such a kinky undressing.

Incidentally, I've never read any recommendation about what should happen to heather cuttings. Making a virtue out of lethargy, I usually leave them on the ground, adding to the mulch, but I don't know if there are disadvantages to this procedure. Once plants have merged, however, the cuttings have to be



Calluna 'Spring Torch': October 2009, western (left) side recently pruned.



Calluna 'Spring Torch': the normal bed, 2009, spring, before the chop.



Calluna 'Spring Torch': May 2010, eastern side recently pruned.



Calluna 'Spring Torch': Autumn 2010, showing more flowers on the left (west) than on the right.

removed to avoid the danger of "birds-nesting", and a good garden vacuum is required, the resulting mass being consigned to the garden compost.

The two beds chosen were *Calluna vulgaris* 'Spring Torch' and 'Allegro' which had half of their 2009 flowering stems removed in a private ceremony in late October. The winter which followed was one of the worst for some twenty years, temperatures falling to well below  $-10^{\circ}$ C, with much snow and ice. Other cultivars were affected by the bad weather, many winter heathers being late to flower, and even  $Erica \times darleyensis$  'Jack H. Brummage' had a redder foliage and was more florescent than usual. Only by early April was it considered safe to prune the other half of each plant.

The result of the trial should be of significance in judging the advantages, if any, of pruning in autumn or spring. The foliage of 'Spring Torch' was already beginning to change colour when the second pruning took place, and there is no doubt that this affected the plant's appearance. Although the newly pruned foliage began to change within days, the shape of the plant was unbalanced, the western side being larger and more vigorous well into the time when we should be enjoying the full foliage spectacle of this cultivar. Pruning in spring, therefore has restricted the growth of one side of the plants, and delayed the formation of the spring colouring of the foliage. This supports the experiment result reported by Small and Wulff (2008: 50), but, further, at the time of writing (September 2010) even the subsequent flowers show a different development, with more on the western side than the eastern.

Meanwhile, what of *Calluna* 'Allegro'? Once again, growth on the eastern side was somewhat restricted during early summer, but at the present time, all the plants have recovered, and I would be very surprised if anyone could notice the difference.

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# A new Erica manipuliflora seedling

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A. W. (Bert) Jones's Dalmatian *Erica manipuliflora* clones AWJ3 and AWJ5, and the sport on the latter, 'Toothill Mustard', have provided a few seedlings in my garden at Swindon.

After *Erica platycodon* 'Madeira Gold' was damaged by frost in November 2005, it was removed. Under its canopy was a seedling which was allowed to grow. From its appearance and location it is almost certainly a seedling of 'Toothill Mustard'. It has an erect, tidy habit, and racemes that although very narrow are long and less interrupted than on other cultivars. Interestingly it is similar to the AWJ5 parent of "Toothill Mustard" but appears to have a stronger constitution.

Most *Erica manipuliflora* cultivars and other, unnamed clones which I grow, have been found to be good garden plants. 'Olivia Hall' (from southern Turkey) is floriferous (Joyner 2007). So is the Corfiot clone, 'Don Richards'. If well pruned, 'Corfu' also has abundant flowers of a deep lilac pink but for a relatively short period. With global warming likely to lead to hotter, drier summers in southern



*Erica manipuliflora* 'Swindon Surprise': Autumn 2010, the original plant in the author's garden.

Britain, these heathers will be of increasing garden value. They are also highly suited to the Pacific North-West coastal strip, from British Columbia through Washington State, and especially Oregon and northern California, where summers are normally quite dry. But 'Ian Cooper' and 'Korčula' may be less hardy than the others. All my plants of 'Ian Cooper' were killed in the very cold but largely snow-free February of 1986 but have survived the three harsh winters of 2005–2006, 2008–2009 and 2009–2010. 'Korčula' suffered and never really recovered from the severe weather in February 1991 when my part of southern England had record low daytime temperatures and strong winds again without much snow. (In February 2008 a similar "dry freeze" killed off a lot of plants in the north-west USA including 'Korčula'. 'Ian Cooper' was also severely weakened. Both had flowered well the previous season (Ella May Wulff, pers. comm.).)

As of November 2010, its hardiness has not yet been really tested. However, it is promising as a specimen plant in *Calluna* or other plantings and, being distinctive, is named 'Swindon Surprise'. It flowers well for two and a half months, starting some six weeks earlier than the AWJ5 clone. The flowers appear a pale pink with a hint of coral but under the microscope the corolla appears translucent, almost opalescent. The anthers are a dark maroon shade and the style is strongly exserted as the photograph illustrates.

#### Reference

JOYNER, P., 2007. Erica manipuliflora 'Olivia Hall'. Heathers 4: 4, 32.

## Erica manipuliflora 'Bert Jones'

Origin: clone distributed under the collector's number AWJ3 (collected by A. W. ("Bert") Jones in Croatia (formerly Yugoslavia) in October 1988 but exact locality now uncertain).

Vigorous and erect, bushy **shrub** (see p. 42). Leaves mid-green, around 6.5mm long, linear, glabrous. **Flowers** numerous in interrupted spike (see p. 42), very pale pink to white (as described by A. W. Jones, 1989. *Erica manipuliflora* Salisb. in southern Yugoslavia, October 1988. *Yearbook of The Heather Society* 1989: 36–44), distinctly zygomorphic with curved style and stamens aggregated on upper side; **peduncles** pink, straight or with very slight curve towards apex, somewhat thicker towards apex, glabrous, to 8mm long, with bracts not above the lowermost quarter; **corolla** appearing white, urn-shaped, to 4mm long, 3.5mm diameter, with four unequal lobes; **calyx** of four free, unequal lobes, white before anthesis, turning entirely green what the corolla is withered, glabrous apart from the margins which have minute hairs; **ovary** greenish, to 1–1.2mm long before anthesis, elongating to 2.5mm at maturity; **stamens** 8, to 4.5mm long, with very pale pink or white filaments and dark anthers (deep crimson turing black-brown after anthesis); thecae widely separate, 0.7mm long, with pore towards apex; **style** pink, curving upwards, to 5mm long, tapering slightly towards style-end which is the same diameter as style. E. C. Nelson.





Erica manipuliflora 'Bert Jones': (above) growing in Toothill, Swindon (© R. Canovan); (left) close-up of flowers, Outwell (© E. C. Nelson).

AWJ3 blooms in September and grows as well in a container as in the ground. In recognition of Bert Jones's work on this species and, indeed, the fact that he collected the clone in Croatia, this is named after him (see p.74 for registration details).

# Growing South African heathers on Puget Sound, western USA

## KARLA LORTZ

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I live on an island on Puget Sound in Washington State. This puts me in a mild USDA Zone 8. Harstine Island is the fourth largest on the Sound but one of the last at the southern end. I am located on Jarrell Cove. So, we are in a very protected spot. As you leave the water's edge, the land rises sharply. We must have a 50-foot elevation at the top of our 2½ acres. We rarely get easterly winds which are so damaging in winter. The wind goes right over our heads. We do get hit with north and southwest winds that whistle down the Cove.

Our temperatures are milder than on the mainland where my display garden is for Heaths & Heathers. There can be a 5° to 8° Fahrenheit difference over that eight mile stretch. The coldest I have seen it in 20 years on Harstine was 14°F; that was last December. Across the bridge at our display garden, it was 8°F. The damage was extensive at the display garden and none was observed on Harstine Island.



Erica cruenta 21 October 2010, with Jarrell Cove visible in the background.

So, this sets the scene for my South Africans. I grow: *Erica caffra, E. cruenta, E. canaliculata, E. curvifolia, E. curviflora, E. gracilis, E. speciosa, E. verticillata,* 'African Fanfare' and 'Winter Fire'. After hanging around in the nursery rather neglected, my favorite stock plants are now kept in pots on my patio. This way, I can keep a better eye on them and actually enjoy them. Those for sale are protected in the cutting house in winter here on the island.

My personal collection on the patio is outside all year except when it gets too dangerous for them. I start to put them up against the house as it slips into the upper 20s (°F). This is usually in November. When the temperature starts to dip below 28°F, I put them in either our packing house or garage where it is cool but above 30°F. They do not need it any warmer. I like to keep them as hardened-off as possible. As soon as that spell passes, they come right back outside against the house. If you bring them indoors, my experience has been they dry out easily, and the flowers turn white; they simply will not color up.

Their overall health and flowering seem to be much better if they are outside as much as possible rather than tucked away too long. A friend of ours in Olympia keeps his 'Winter Fire' on his porch all year. I always tell him I don't believe him that it is still alive, so he e-mails me photos. It gets enough protection from the house and nearby trees that he has had it out at 20°F. He did have to take it in last December when it was getting near 0°F in Olympia. We are not used to these new extremes in weather and have to adjust the way we operate now.

A recent storm brought  $8\frac{1}{2}$  inches of rain in 36 hours. I figured that would be the end of this round of flowers from the battering they would get. Two weeks later, they are still just fine.



Erica 'Winter Fire' covered with snow, 17 February 2007.



Erica 'Winter Fire' on Gary Schuldt's patio in Olympia.

The hardiest one for me is *Erica speciosa*. *E. canaliculata*, 'African Fanfare', *E, caffra* and *E. curvifolia* have been the next hardiest. We have had them all survive under 25°F. The rest of them are dead at 28°F or below.

This year, we were treated to blossoms both spring and fall from all of our collection except for *Erica canaliculata* and *E. curvifolia*. It is late October as I write this, and they are still beautiful.

A hummingbird is visiting our large pot-grown *Erica speciosa* as there is little else out there in bloom right now. I have seen hummingbirds visit the tubular ericas both spring and fall. They spend a few minutes on the large *E. speciosa* just going around the plant from flower to flower.

I would venture to say that South Africans are not deer-proof. The deer will eat them all back hard except for *Erica cruenta*. If I leave the plants out in the nursery here on Harstine, which is open to the deer, they keep chewing them back to stubs. They eat those more than any other heath or heather. They have jumped the fence in our yard and eaten back 'Winter Fire' and all the flowers off 'African Fanfare' on the patio. 'African Fanfare' was loaded with buds and flowers too. It was tragic to wake up to nothing but stubs! Once again, *E. cruenta* right next to it was untouched.



Erica speciosa. left: on 21 October 2010; right: flowers on 27 August 2010.

We use the same potting soil mix as the rest of the nursery plants. My husband does mix in some sand when he puts them in patio pots. I don't think that is necessary, but I cannot stop him! I do top dress with fertilizer in summer. I also give them a dose of Miracle Grow® every so often as I use that regularly on my hanging baskets. They are such vigorous plants that potting them up as needed makes for much healthier specimens.

Our summers usually have two months with no rain. Regular irrigation is critical to their survival in pots. They have no pests nor diseases. The only issues are cold and deer. So, I find the South African heaths easy to care for and a nice addition to our patio pots. Their bloom in both spring and fall, when nothing else is in bloom in pots, is where they really shine. Their bright colors, such as yellow and orange not seen in regular heaths, and their spectacular tubes are worth all the effort.

# Hunting for Ericas in Madagascar

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*Erica* is a very large and widespread genus with some 860 species in a north-south distribution ranging from Lapland in the north to the Cape of Good Hope in the south. To help us understand the evolution of the genus and to help with its subdivision and the relationships of species over the whole range, a team at Stellenbosch University is undertaking an analysis of the DNA of a large sample of species, presently 480 and hopefully up to 650. We have samples from many areas in the distribution range including European species, but one area that was almost entirely lacking was Madagascar. The team consists of Dr Mike Pirie, a young postdoctoral researcher from UK, Professor Dirk Bellstedt and myself.

Madagascar is currently known to have about 45 species of *Erica* and all of them were formerly in the separate genus *Philippia*. All of them are endemic: in other words they occur only on the island. The last revision of the Malagasy species was produced by Perrier de la Bathie in 1927. Since then more material has been collected and more areas have been investigated. Dr Larry Dorr who set up the offices of Missouri Botanical Garden in Madagascar in the 1980s started looking at the genus there and finds that quite a few more species need to be described, but with lots of research required to resolve all the variation in and between the species.

In April 2010 the Nineteenth International Congress on African Plants was held in the capital, Antananarivo. We used the opportunity of attending the conference to put in some field work before and afterwards in order to find and collect some of these *Erica* species. Much planning had to go into the expedition since none of us had been to the island before and the bureaucratic setup was the usual problem for an African country. Fortunately Larry came to the congress and managed to join us for the trip down south to revitalize his interest in the genus. Apart from his experience with Malagasy species of *Erica*, his knowledge of French and Malagache came in very handy.

The British were the first colonial power on the island and therefore many of the early plant collections by colonial officials and missionaries from the London Missionary Society were sent to the Royal Botanic Gardens, Kew, where they were described in the mid- to later 1800s. Later in the nineteenth century the French took over the island in an 'exchange' and the subsequent collections landed up in Paris with many of them still to be worked through.

The species of *Erica* occur mainly along the highland plateau that runs down the centre of the island for some thousand kilometres, at an average altitude of 1,100m. Along this plateau there are numbers of small outcropping peaks and some larger ranges which attracted our attention after checking the localities



Figure 1. Andringitra National Park with two *Erica* species in the foreground and two large waterfalls (Riambavy, the queen, and Riandahy, the king) in the background.



Figure 2. Mike Pirie investigating a tall Erica with two other smaller species nearby.



Figure 3. On the way up to Pic Boby through large granite boulders and dense stands of heaths.

of all the collections listed by Larry. The large, southern mountains of the Ampiadianombilahy Range fall mainly in the Andringitra National Park and this was our first objective (Figure 1). The 450km drive to Andringitra along a narrow, windy/winding, national road gave us our first glimpse of heathers growing on grassy hillsides with scattered eucalypts, pines and wattles, all weedy aliens of course. At one point we had to stop because of a very recent motorcar accident. This allowed me a quick visit to the nearby roadside slope which revealed five species of *Erica* in a hundred square metres! This is certainly the highest species diversity outside of the Cape.

We spent four days in Andringitra National Park camping on a mid-altitude plateau at about 2,000m. Hiking in the park is relatively easy with over 100km of trekking routes which are becoming popular destinations for outdoor enthusiasts visiting the island during the winter months. The park is closed during the rainy summer months due to impassable access routes. Guides have to be employed and porters are eager to take one's heavy packs and tents, and our plant presses, up to the campsite. They also do all the cooking which consists of rice and more rice with some other food admixed – all supplied by ourselves for everyone! Fortunately the weather was perfect for the four days and this allowed us to hike around with light day-packs to study the flowering and fruiting heaths easily.



Figure 4. View of Ampiadianombilahy Mountains from the summit of Pic Boby with numerous Erica species in all the vegetated places.



Figure 5. Andringitra, mid-altitude plateau (2,000m) with two species on the shallow soiled flats: low, dark green *Erica rakotozafyana* and the reddish brown mass of *E. madagascariensis* (see Figure 10) in a boggy area in the middle distance. Note the dense olive-green covering of heaths on slopes on the left.





Figure 6 (both). Erica baroniana.



Figure 7. Erica boutonii.

The mountains are composed of impressive granite outcrops (Figures 1, 2 and 4). The central area has the second highest peak in Madagascar, Pic Boby (Imarivolanitra in Malagache) (altitude 2,658m). We easily got to the summit and had an amazing view of the range to the north (Figure 4). Apart from the forests in ravines and on sheltered moist slopes the open slopes are dominated by Erica species to the extent that they can sometimes form an impenetrable subforest with trees growing to 6m tall (Figure 1). Mostly they are 1-2m tall forming an olivegreen 'carpet' over the slopes and in every gully (Figures 2, 3 and 4). Where there are shallow soils or boggy areas the heaths are small, low shrublets (Figure 5). There is no shortage of water in the park with many gushing streams (Figure 1), but despite this the vegetation is





Figure 8 (both). *Erica goudotian,* very like *E. scoparia* from south-west Europe.

sometimes set alight by lightning strikes or nowadays by indiscriminate human burning practices. It would appear that only a few of the species are resprouters so burning could have a serious effect on the survival of the smaller, more delicate and rarer species.

The Madagascar species all bear rather small, dull-coloured flowers with a large dish-like stigma like a satellite dish (Figures 6–10). Some of the flowers are attractively coloured (Figure 10), at least when looked at from close-up. They are generally believed to be wind-pollinated although several, with their remarkably altered stigmas (Figures 11 and 12), could well have another pollination syndrome. When disturbed these species did not release clouds of pollen like the others. Quite a number of the species looked very similar to the philippioid and salaxid species from the Cape or to *Erica scoparia* from Europe (Figure 8). For me it was amazing to see some species growing low among restiad reeds in a seepage zone exactly like our species do in the Cape and like the heathers growing on the Roundstone Bog in Connemara, Ireland.

During the Congress we went separately on different one-day excursions for delegates and I managed to pick up a few heathers in the Tapia woodlands west of Antananarivo. After the Congress we visited the Ankaratra Range around a hundred kilometres south of the capital. Unfortunately, clouds kept us from reaching the interesting summit ridges of Tsiafajavona (altitude 2,643m), but we



Figure 9 (above). *Erica bojeri*, sometimes with yellowish flowers and red stigma.
Figure 10 (right). Unidentified species of *Erica*.







Figure 11 (left). *Erica madagascariensis* (see Figure 5).
Figure 12 (above). *Erica parkeri*.

did see some interesting and different species of *Erica*, one of which with its open leaves and amazing stigmas appears to be a new species. Access to the mountain was by old gravel roads built by the French forestry authorities ages ago but not maintained since they had to leave the island in the early 1970s. Some of these roads were difficult to negotiate even on foot!

With all the hype about conservation in Madagascar we had to go through the strict bureaucratic procedures for allowing us to collect and to export our material. We appear to have collected about 26 species with several of them difficult to identify and possibly as yet undescribed.

Madagascar is a wonderful place to visit now that it is being opened up to outsiders. Tourism is picking up slightly after the political unrest in 2009, but tourists are mainly heading for the fine beach resorts and reserves along the east and north coasts. Few 'dare' to tackle the interior where there are good trekking possibilities and places to experience island life in the many villages and towns that the main roads pass through. The most striking thing about the island is, alas, the destruction to the environment that has already happened and, alas, is still occurring at a rapid rate – forest and grassland degradation, overgrazing and bad ploughing practices, and the inexorable spread of alien trees (eucalypts, pines and wattles). All available valleys and wet slopes have been ploughed up for paddy fields so this natural habitat is very rare. With the high rainfall in the central highlands all the large rivers roaring down to the east and west coasts are full of red mud and silt which pour out into the sea – Madagascar certainly lives up its name of the Red Island.

# The trials and tribulations of growing heathers on a terrace in the Mediterranean

## AARON SIPF

Via Dolcetta 10, Sassari, 07100, Italy (botanikk2003@yahoo.it)

My love affair with heathers started when I was quite young, perhaps about 12. I ordered some heathers from Alice Knight's Heaths and Heathers Nursery in the USA, and planted them where I lived, in northern New York. My attempts were not too successful, perhaps because of the cold and possibly because of soil that wasn't acid enough. As time went on, my life changed; I went to college, graduated, and lived in many different places. For many years I didn't have heathers, simply because I didn't have the outdoor space, and/or because I was moving around too much. Finally in 2003, when I moved to the island of Sardinia in Italy for family reasons, I wound up renting an apartment with a huge terrace facing roughly south-east. Finally, I had a space again to make an attempt at these wonderful shrubs. The problem is that the climate here is not conducive to growing Calluna and many of the northern Erica species successfully. This is a hot, dry climate with wet winters. We do have some native *Erica* species here, and since I love hiking in nature, I've been lucky enough to see E. arborea, E. scoparia, and E. terminalis in their native habitats. I have yet to find E. multiflora, but hope to find it soon.



Hiking in the Sulcis Mountains, Sardinia; the cuttings in my front pocket are Erica terminalis.

Once I had settled in a bit in my new place, I thought I'd try my hand at growing heather again. However, since my gardening space is a terrace, I am not able to plant anything in the ground, and therefore must grow everything in pots. I knew there would be some challenges: namely the heat and the lack of humidity. I certainly knew that unlike many parts of Britain and the Pacific Northwest in the USA, I wasn't living in a heather heaven, but rather the opposite, at least as regards Calluna and some other European species. Even the native species here are obviously not growing in pots on a hot terrace. Erica arborea and E. terminalis seem to prefer slightly acidic locations near water. The microclimate there is not the same as a sun-drenched terrace in the city. Although I was aware of these limitations, I decided to try anyway. I used ericaceous compost and plastic pots to help cut down on the amount of evaporation, since I figured (as many people would) that the main problem to be encountered here would be keeping them moist enough in the long, hot summers. At first, things seemed to be going well, until the full force of summer hit. I started to notice a rapid decline in many of my heathers. The tips of the branches would turn brown, and the brown would start to spread, leading, in many cases, to the demise of the plant. My losses were significant. Some were able to recover



Part of my potted heather garden with a young tree fern (*Dicksonia antarctica*) in center (and Alaska, the cat, top left); summer 2010.



The heathers, June 2010; the foreground plant is Erica erigena 'Thing Nee'.

once the cooler autumn temperatures and rains arrived, but most did not. I tried replacing the plants and trying again, but always with the same results. Needless to say, I spent quite a bit of money with no positive results. Finally after losing a lot of plants again last summer, I'd had enough, and decided it was time to figure out what the problem really was.

Based on the symptoms and the presence of mycelia in the pots, it seems that the problem was fungal-related. I was aware of this before, but not really sure what to do about it. I decided to tackle this problem scientifically. Having a degree in biology focusing on botany and ecology, I felt that I was up to the challenge. Carefully inspecting the victims, I indeed noticed that there seemed to be mycelia everywhere. The question was: What it was and why it was attacking my plants? As any gardener knows, if your plants are being attacked by a pathogen, it implies that the plant has been weakened somehow.

Using the Internet, I discovered the dreaded water molds: *Pythium*, *Phytophthora*, and *Fusarium*. Perhaps my problem was caused by *Fusarium*. *Pythium* and *Phytophthora* growth is favored by wet, poorly drained soil and cooler temperatures. *Fusarium*, on the other hand, prefers warm temperatures 25°–35°C (77°–93°F). Plants tend to be infected only when stressed, since *Fusarium* is ubiquitous. High pH also seems to favor the growth of some of these pathogens, as well as extreme temperatures. I only started to see the effects



Winter foliage of an unknown Calluna



Erica mackayana 'Galicia', originally from northern Spain.



Calluna vulgaris 'Carngold'



Erica terminalis, a Sardinian cutting.



Erica plukenetii, Cape heath



Erica umbellata 'David Small', originally from northern Spain.

once the conditions were hot. It seemed strange to me that my plants could be attacked by a water mold to begin with. In my hot, dry conditions, waterlogged soil seemed unlikely. Following a certain line of logic, plants are usually attacked by pathogens when they are not healthy, so the question remained, why were my plants so unhealthy? I got together various instruments to aid me in my search for an answer: a probe thermometer, pH test strips, and a probe to check moisture levels. With these tools, I made some interesting, and somewhat surprising discoveries.

I quickly discovered that a lack of moisture wasn't the problem; shockingly, it was the opposite! My heathers were still quite small, and lacked extensive root systems. In general, heathers don't seem to be particularly thirsty plants. I was so afraid of not watering enough that I was over-compensating and watering too much. What tricked me was that the top of the soil often seemed very dry, but probing more deeply to the bottom of the pot, I realized that there was plenty of moisture there; in fact, the bottom of the pots was like a fetid swamp. Lacking extensive roots systems, the plants were unable to absorb all the moisture, and therefore it was lying at the bottom. No wonder these drainage-loving plants were dropping like flies. I immediately transplanted the few survivors and used only terra-cotta pots. It is much more difficult to overwater in clay pots, since they are porous and the moisture can evaporate from all sides.

There was another problem though: pH. Obviously I had been fully aware of which heathers needed acid soil, and had used an ericaceous mix. What I hadn't considered, however, was the pH of the water I was using to water them. Unlike some gardeners in more favorable climates, there is no rain here in the summer; there is usually no rain for months. I have no choice but to use tap water. Checking the pH of the soil, and of the tap water, I realized that my tap water is very alkaline, as it often is to prevent corrosion of the pipes. In such small containers, the pH of the soil was rapidly changed from acid to alkaline, probably even after a few waterings. High pH might not only encourage the growth of certain pathogens, but also cause an iron deficiency. Perhaps in some cases at least, the brown tips were caused by an iron deficiency (a classic sign). I'm sure the pH issue plays a role, but I believe it's secondary to the lack of drainage, as I lost alkaline-tolerant Erica as well. Soil pH may have been a contributing factor that weakened certain plants, especially the lime haters. The solution? Using rain water is out of the question, simply because I can't collect enough to last for months. It would be too much weight on the terrace as well. Instead, I started acidifying the tap water I use with apple cider vinegar. Using the pH test strips, I was able to figure out the right amount to add to get the correct acidity. I also started using a seaweed-based liquid fertilizer with iron to help counteract any residual effects and ensure that the plants have adequate minerals and iron.

The third problem is just the heat and the strength of the sun. Using the temperature probe, I soon realized that in full sun, the temperature inside a

pot can easily rise to even 46°C (115°F). These high temperatures stress the plants considerably, and could also encourage fungal growth. Considering the natural habitat of some heathers, those temperatures alone could kill the plant I imagine. To alleviate the problem, once the summer heat starts, I put up a shade cloth that blocks out the hot sun. I have noticed that once the intensity of the sun increases, yellow-foliaged cultivars can suffer significant sun burn. However, it seems that some morning sun is best, because if these cultivars are under a shade cloth all day, they seem to turn lime green. I think the key is blocking the intense, hot midday and afternoon sun.

Needless to say, after all this research and experimentation, I am happy to say that nearly all (but not 100%) of my heathers made it through the summer, for the first time since I've been here. However, some did better than others. It seems that *Calluna* cultivars, for example, need cooler temperatures (perhaps cooler nights) to properly set buds. Flowering was sparse at best; some didn't flower at all. Buds dried out easily and the color wasn't accurate. I think that the heat and lack of humidity is too much for them to flower successfully. While some heathers seem unable to adapt to these harsh conditions, regardless of pampering, other heaths flowered quite well. I certainly do love these enchanting evergreens, or I wouldn't go through all the trouble to get them to survive on a hot terrace in the Mediterranean. Below I list some tips based on my personal experiences.

## Tips for growing heathers in pots (particularly in hot climates)

- 1. Never use plastic pots, always terra-cotta, even in hot climates. Plastic encourages moisture stagnation (hence fungus), inadequate drainage, and soaring summertime temperatures inside the pots.
- 2. Acidify your water if rainwater isn't available. Use readily available pH test strips to figure out how much vinegar is needed to get the right pH; I use organic apple cider vinegar. Add additional iron just to be on the safe side. Water sparingly, and use a moisture probe to see how much moisture is at the roots. Don't be fooled by the top looking bone-dry, when perhaps below the surface there is plenty of moisture.
- 3. Provide midday and afternoon shade. I have to provide artificial shade, because my terrace is in the sun all day. In my climate the sun is too hot and intense for any plant growing in a container. I've noticed that all my plants benefit from shade ... even the heat and sun-tolerant ones. Providing shade also helps discourage heat-loving fungus, leaf sun scorch, and general plant stress.
- 4. Make sure you use the right potting soil. I personally have been using pure peat and perlite. I wish I could avoid peat for environmental reasons, but as I've read, nothing works like peat. Make sure the mix is very light and well-draining. This becomes even more important in pots.

## Heathers I recommend (and not)

The Cape heaths are, not surprisingly, the best for this climate. They seem to do very well here, and don't seem to be affected by the heat at all. Well-drained, acidic soil seems to be all they really need. *Erica plukenetii* grows very well, with lots of flowers in December. I also have *E. caffra*, *E. lutea*, *E. nana*, *E. gracilis* and other small Cape species, which due to a cat-related accident, I can't identify until they flower. I plan to start more seeds this winter.

*Calluna* – yellow-foliage cultivars need more shade. Don't be surprised if they don't flower in a hot, dry climate. I will experiment next summer with fertilizer, and additional water, etc., to see if I can get better results. Based on my experience, they are best grown for their foliage in this climate. As suggested in an old Heaths and Heathers nursery catalog, I would avoid the creeping cultivars in pots, as they may be more prone to fungus. The cultivars that I have which have performed well are 'Wickwar Flame', 'Carngold' and 'Firefly'.



The patio pots, June 2010

Erica

### Recommended

*Erica umbellata* 'David Small' did very well for me, as did *E. mackayana* 'Galicia'. I would also recommend *E. erigena* 'Superba' and 'Thing Nee', and the local, wild *E. terminalis*.

## The jury is still out on these

*Erica ciliaris* 'Aurea' grew well this year, but is susceptible to sun burn, and did not flower until October I believe, when I got maybe two flowers in total. One *Daboecia* ('David Moss') grew well in the spring, but no flowers this year (last year I had one plant flowering sparsely throughout the summer). *E.* × *darleyensis* grew well enough, but has sparse or no flower buds. This summer I have acquired *E. arborea* 'Estrella Gold' and *E.* × *stuartii* 'Irish Lemon'. They are doing well but have not yet been through a summer.

#### Avoid

*Erica cinerea* and *E. carnea*. I had one *E. carnea* doing very well until the heat, and then seemed to succumb to fungus. *E. cinerea* never seems to grow well, and will fade slowly and die. I would avoid alpine species in general, and those better adapted to cooler conditions.

These are my observations and recommendations based on my experience. Some of these tips could apply to anyone growing heathers in pots, regardless of climate. I hope this article helps other gardeners who want to grow heathers in pots avoid certain problems that I had, regardless of climate. Only time will tell if they continue to thrive, but one successful summer is encouraging. I can give updates in a future bulletin. Happy gardening!

#### Note

1. Landis, T. T., 1989. Diseases in container tree nurseries. Disease and pest management, pp. 1–99 in Landis, T. D., Tinus, R. W., McDonald, S. E. and Barnett, J. P. (editors), *The container tree nursery manual*. Volume 5. (*USDA agriculture handbook* 674.) (Viewed as an excerpt on Bugwood.org).

# The Heather Society's Proceedings 2010



Foggy Bottom revisted -- on the left is Adrian Bloom (© Barry Sellers).

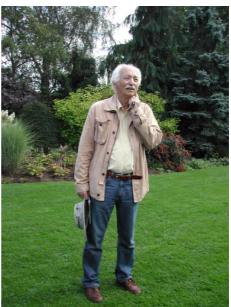
## 2010 Annual Gathering, King's Lynn, Norfolk, 10–13 September 2010

The Society's 2010 Annual Gathering was held at the well-appointed Ramada Hotel in King's Lynn. There were 28 members, many of whom have been attending for so many years that it was almost like a family gathering.

Before the usual welcome by the present Chairman, David Edge, there was a minute's silence to honour the memory of Arnold Stow, the Society's recent Chairman, and one of its best loved members, who died two months after last year's Conference.

Tim Marshall, Head Gardener at Holkham Hall, then gave an illustrated talk on plant-hunting in Bolivia, a country that he has visited 14 times and hoped to visit again shortly. He concentrated on the very mountainous south-west and central parts of the country, where, by the look of the bare, rocky terrain, hardly anything should grow. But this was disproved by the many photographs we were shown – particularly of cacti (most with unpronounceable names), which are Tim's special interest. This area is in the centre of an earthquake zone and many of the local people have continued to live in the tents they were supplied with after a quake six years ago, as they are an improvement on the hovels which were their homes previously. Their traditional drink is made from fermented maize. Fermentation is effected by the saliva of the local women who chew the grain and spit it into the mixture. Lovely!





Peter Bingham in his nursery (© Daphne Everett).

Adrian Bloom at Bressingham (© Daphne Everett).

The visit on Saturday to Peter Bingham's wholesale heather nursery was a real treat. The business was started by Peter's grandfather in 1908, but at that time was devoted to fruit production. Peter and his wife Maggie now grow just under a million heathers annually. There is great attention to detail in everything they do on the nursery and this is reflected in the superb quality of the heathers offered for sale. The latest innovation is the manufacture of compost tea, which (as I understand it), is a way of growing beneficial bacteria in a liquid – this is sprayed on to the plants to help combat disease.

After lunch (which appeared as if by magic), we went on to visit Peckover House in Wisbech, a classic Georgian house, built in 1772 by Jonathan Peckover, a member of a Quaker banking family. The two acre garden had some pleasant late-flowering borders and many interesting old trees. The greenhouse contained orange trees (with fruit) which were reckoned to be around 300 years old.

We arrived back at the hotel around 4.15pm in time for a cup of tea. Then, breaking with tradition, the evening started at the unusual time of 5pm, with a talk on The Brecks, given by James Parry, a writer on wildlife and Chairman of the Breckland Society. The Brecks is an area which was once mainly heathland. The soil is poor and was very difficult to cultivate until the twentieth century when machinery powerful enough to work it became available Since 1900, 85% of the heathland has been lost to cultivation and this area is now known as the sugar beet capital of the world. There are several areas of managed heathland in

the Brecks. Restoration and management of Cavenham Heath, near Mildenhall, began about five years ago and it is responding well, assisted by sheep and the local rabbit population. Conifers were planted on part of the area during the First World War, for the production of pit props, but the trees have now been felled and the area returned to heathland. Another area, Knettishall Heath, is a country park and here, the grass and scrub are kept under control by a herd of semi-wild Exmoor ponies.

After the AGM on Sunday morning, we set off for Bressingham Gardens and Foggy Bottom, with a brief stop at Knettishall Heath on the way. A coach parked on a narrow country road, and lorries loaded with potatoes tying to pass every few minutes, don't make a comfortable mix, so we didn't stay long.

My first impression of Bressingham was that it had developed into an enormous theme park. So it was a pleasure to find that the Dell Gardens were looking as beautiful as ever, with plenty of late summer colour.

Foggy Bottom had changed out of all recognition from the last time we visited, although many of the original (judiciously pruned) conifers are still there. The garden has been extended over the years and heathers now play a rather small part in the overall design. Grasses are Adrian Bloom's special interest at the moment, and he kindly gave up an hour or so of his Sunday afternoon to take us round and explain his ideas for their use in the garden. Members will be pleased to know that heathers do still play a part at Bressingham – but in the recently developed Winter Garden.

For the Sunday evening entertainment (at its usual time after dinner) Susie had asked a few members each to give a three-minute talk on a heather they had found or raised. I think she was rather surprised by how many people responded, and a very diverse and entertaining selection of mini talks they were. Consequently, the "Game with audience participation" we were promised in the programme, didn't take place. The mini-talks were interspersed with book and plant auctions, with Alan Kay acting as auctioneer in his own inimitable way.

I think that everyone agreed that (as usual) this was a very happy and successful Conference - for which many thanks are due to Susie and her helpers.

DAPHNE EVERETT

## OBITUARY

JÜRGEN SCHRÖDER (1936–2010) President of Gesellschaft der Heidefreunde; Vice-President of The Heather Society

Jürgen Schröder passed away on 21 June 2010. His death is a great loss for us. He was instrumental in developing the German Heather Society (Gesellschaft der Heidefreunde). We have lost a person who had a considerable knowledge of heather and related plants.

Jürgen was a member of the German Heather Society from its foundation in 1977 and soon joined the managing board. Since 1996 he was the Chairman and was always very interested in building up more intensive relationships between the



heather societies in Europe and North America. In 2000 he organized the First International Heather Conference in Elmshorn, near Hamburg, in Germany.

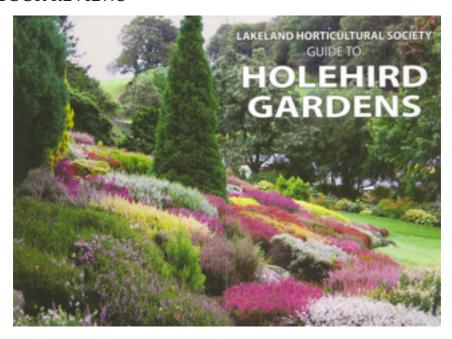
As a member of the Körkommission (Commission to select the best plants) of the Lehr- and Versuchsanstalt (Academy and Experimental Station) of Gardening in Bad Zwischenahn, he gained more and more knowledge of heathers and the other plants belonging to a heather garden, which he liked to share with fellow members by publishing articles in Der Heidegarten, the German Heather Society's newsletter.

Unforgetable too, for the participants, were the tours Jürgen organized within Germany, and to Britain and Ireland as well as to South Africa. He designed heather exhibitions for many national garden shows including the International Garden Exhibition (IGA) at Rostock in 2003.

In 1996, Jürgen took over the design of the heather area in the botanical garden of Bremen. But his masterpiece was the Findlingspark in Nochten, where he developed a heather area in a restoration zone of the former coal mine since 1999. Nowadays this park has more than 100,000 visitors a year.

It is hard to imagine that his place will be empty in future. His expertise, his fellowship, his confidence and his faithful performance of the labour for our society, which he always fulfilled untiringly, will remain in our hearts. We grieve for Jürgen and thank him for his great work, and our sympathy is with his wife Dorle, who joined in all his activities.

### BOOK REVIEWS



Lakeland Horticultural Society Guide to Holehird Gardens.

A splendid photograph of a summer heather garden forms the front and back cover of this comprehensive new guide that contains every piece of information you may require when visiting Holehird.

After an introduction to the Gardens there is a detailed description of each bed and area with detailed descriptions of the plants with Latin and cultivar names, all supported by excellent photographs. The guide also tells you what to see in different seasons, which shows that Holehird Gardens always have something of interest throughout the year. The centrefold is a schematic map of the entire garden with the routes of two suggested walks. There are sections concerning the three National Collections held at Holehird, and how they came to be established here. Lastly, there are some pages discussing the glasshouses and soil condition.

This booklet is an extremely useful guide if you are to visit Holehird Gardens as it ensures that no corner or plant will be missed.

Susie Kay

W. von ERHARDT, E. GÖTZ, N. BÖDEKER, S. SEYBOLD & A. COOMBES. 2010. *The Timber Press dictionary of plants names*. Timber Press, Portland & London. UK£25. ISBN 976-1-60469-115-3.

This sturdy, small (in size) book comprises more than 900 pages – a solid reference work, in other words, containing the Latin names of about 20,000 taxa, with a glossary of authors. I have the German edition, *Zander Handwörterbuch der Pflanzennamen*, but this edition makes the dictionary somewhat more accessible to the Anglophone world. It does contain some more information about the common names of plants in English "languages": bear in mind that a bluebell is not always a bluebell, no matter what Gertrude Stein said about a rose.

The principal heathers and heaths are included. The entry for *Calluna* is compact: there is, of course, just one species. *Daboecia*, the genus, is stated to be called "Bruyères des Açores" in French which is rather odd while the English name has been printed with reversed vowels – "St Daboec's Heath" – beside the generic name but correctly in the entry for *D. cantabrica*. There are around 50 species and hybrids under *Erica*, but a few names are incorrect: for example, *bauera* should be *baueri*, *mackaiana* has not been amended to *mackayana*. Other oddities are that *E. × hiemalis*, the name for a garden hybrid of very uncertain application, is given as from South Africa, while *E. × willmorei* is listed although the true hybrid is extinct and so the name has been misapplied for at least 170 years.

However, this is a very useful, compact dictionary, with coded information on habit, flowering period, foliage type, toxicity, hardiness (using USDA zones) and distribution in the wild. It may not be perfect and entirely up to date, but I still recommend it to anyone seeking a modern dictionary of Latin names.

E. C. Nelson

W. ROBINSON. 2010. *The wild garden ... A new illustrated edition with photographs and notes by Charles Nelson*. The Collins Press, Cork. €29.99, UK£26.99 ISBN 978-1-84889-035-0.

William Robinson was born in Ireland, in 1838. As a young man he left home for London and was taken on as under-gardener at the Regent's Park Botanic Garden. He wrote several books, as well as publishing two successful magazines. Possibly his best known and most influential book was *The wild garden*, which although written in 1870, is still very relevant, and could easily have been written in the twenty first century.

In **Part I (Explanatory)** of his book, William Robinson sets out his ideas for the wild garden. **Part II (An enumeration of hardy exotic plants)** lists the hardy exotic plants which are suitable for naturalization – with details of country of origin, colour, time of flowering, propagation methods and where to plant. As "hardy exotics", Robinson lists such well-known plants as *Anemone, Astrantia, Baptisia, Centaurea, Gypsophila,* honesty, *Liatris,* and *Erica carnea,* which, although they are undoubtedly exotic, few of us would refer to them in that way today.

In Part III (Selections of hardy exotic plants) he advises on planting the right plants for the soil conditions and lists those suitable for various situations. He does not forget our own native plants, and in Part IV (The garden of British wild flowers) he suggests many wild flowers that could also be incorporated. (In William Robinson's day it was not frowned upon to strip our countryside of wild flowers.)

The only illustration in first edition of *The wild garden* was a black and white frontispiece. By the seventh edition there were many: woodcuts, drawings and photographs, but still in black and white.

Charles Nelson has taken William Robinson's first edition and, whilst keeping faithfully to the original text, has added an introduction, with a very interesting and well-researched account of William's life and career. He has also written in note form, detailed descriptions of all the plants mentioned in the original text. And – last but not least – has included a wealth of beautiful colour photographs, all taken by Charles himself.

This is an attractive, well produced book, packed with information of interest to students or lay-people alike, and is the perfect present for anyone interested in plants and gardens. Charles has turned William Robinson's dowdy little 'duckling' of a book into a very handsome swan. William would be green with envy!

**Daphne Everett** 

E. IKIN. 2010. *Thoughtful gardening. Practical gardening in harmony with nature.* The National Trust Books, London. UK£ 00. ISBN 978-1-90540-0-942.

Those members who visited Nymans during the 2009 Annual Gathering have experienced the "thoughtful gardening" of Ed Ikin for he is the Head Gardener at Nymans. Compost heaps steaming away gently are among my vivid memories. Those who were at Kingfisher Nurseries during the 2010 gathering learned about the benefits of compost tea – for heathers, to keep them disease-free and strong-growing. There is a recipe for it in Ikin's book but I am not sure I follow it. Besides, the water in which the tea brews needs to be kept warm (above 20°C, 68°F), and well oxygenated by bubbling air through it like a fish-tank. Never mind, there are plenty of other tips and excellent gardening advice in this book. Do you know that a few Mexican marigolds planted in a thick patch of ground elder or bindweed "can eliminate weeds completely". I will have to try it.

On the other hand, I am disturbed (especially given the freezing weather as I am writing this) to read Ikin suggest that "Tree heathers such as *Erica canaliculata* (white flowered) and *Erica discolor* can become fairly stately in sheltered spots, achieving heights well over 2m (6½ft) without losing their shape." Apart from the facts that the first species is most usually pink-flowered, and the second is most unlikely to survive even a mild British winter or even reach 2m in height, the suggestion is not prefaced by much of a warning about hardiness: "The wet and cold British climate threatens South African plants far more than simple sub-zero temperatures, and we should choose only the most free-draining soil for them." No free-draining soil will allow Cape heaths to survive winters like the present one. And, that's really the only mention of heaths or heathers.

The chapters in *Thoughtful gardening* cover soil, water, protecting plants, choosing plants, growing healthy plants, a healthy lawn, and wild-life friendly gardens. The book is attractively illustrated in colour with drawings by Alan Hancocks, and is printed throughout as if it were a gardener's notebook. A useful, positive volume – an ideal gift for any gardener.

# Supplement XI (2011) to International register of heather names.

## Registered names

## Calluna vulgaris

## 'Harry's Grace'

- ® C.2010:01 registered on 17 February 2010 by Northeast Heather Society, USA.
  - \* C. vulgaris f. multibracteata; blooms much later than other cultivars. Flowers lavender (H3); not opening fully, but not bud-flowering; solitary at apex of short, multibracteate side-shoots on underside of main stems; October to February: calyx lobes to 3.5mm long, 2mm broad, ovate; corolla to 3mm long; stamens 8, not apparently malformed; gynoecium present, not malformed. Foliage dark green. Habit bushy; after 2 years 25cm tall, 30cm across.
  - \* Sport on 'Chase White' found by Harry Bowen in his garden at Chase Road, Falmouth, Massachusetts, USA.
  - ☐ Heather notes 18 (1) (January 2008): 6 (as "Chase bud"); \_\_ 20 (1): 2 (Winter 2010); \_\_ 20 (4): 5 (Fall 2010).

  - N: Named after Mrs Grace Bowen, and Mr Harry Bowen.

## 'Mirja'

- ® C.2010:02 registered on 14 June 2010 by Kurt Kramer, Edewecht, Germany.
  - \* Bud-flowering: lilac (H4): September–December. Foliage dark green. Habit robust, upright; after 3 years 40cm tall, to 30cm spread.
  - $\mbox{\$}$  Sport on 'Juliane' found by Kurt Kramer in 2008: "Abweichungen von anderen Sorten und Unterscheidungsmerkmale: Starker Wuchs."

#### 'Ria'

- ® C.2010:03 registered on 14 June 2010 by Kurt Kramer, Edewecht, Germany.
  - \* Bud-flowering: pink (H8), buds small to medium sized: September–December. Habit moderately robust, after 3 years 25cm tall, 30cm across.
  - Sport on 'Vivian' found by Kurt Kramer in 2007.

## 'Annes Goldzwerg'

- ® C.2010:04 registered on 7 September 2010 by David Edge, Wimborne, Dorset.
  - \* Flowers normal, sepals and petals lavender, to 3mm long, anthers brown; August–September. Foliage yellow in summer, tinted orange in winter. Habit trailing/weeping; after 3 years only 3cm tall; trailing stems to 24cm long after 3 years.
  - \* Sport on 'Anneszwerg' in 2006 at Forest Edge Nurseries, Wimborne.
  - △ Bulletin of The Heather Society 7 (11): 10 (Autumn 2010) [NB, "Bertha" was the name given, as a joke, to the "lady" whose "hair-do", complete with pink bows, was composed of the cultivar 'Annes Goldzwerg'.]

### 'Ruby Sprinkles'

- ® C.2010:05 registered on 28 June 2010 by David Wilson, Chilliwack, British Columbia, Canada.
  - \* Bud-flowering, mauve (H2), September–December. Foliage summer foliage green; new growth orange-red. Habit upright, moderately vigorous.
  - \* Deliberately raised seedling from unnamed bud-flowering seedling pollinated by 'Spring Torch', by David Wilson in 2005, selected in 2007.
  - ☐ Cascades Heather Society[electronic newsletter] (Summer/Fall 2010: 2.

#### 'Colleen Bawn'

- ® C.2010:06 registered on 7 September 2010 by Susie Kay, Lettergesh, Connemara, Ireland.
  - \* Flowers normal, white, anthers tan; flowering on principal shoot and then on lower axillary shoots; June–September. Foliage glabrous, green. Habit spreading; after 3 years to 30cm wide; to 15cm tall.
  - \* Wild plant at Lettergesh, County Galway.

N: "Colleen Bawn" is an Anglicized form of an cailín bán (a fair-haired girl), and has been used as a plant name for white-flowered plants (e.g. Narcissus 'Colleen Bawn').

## 'Golden Angie'

- ® C.2010:07 registered on 1 December 2010 by Johannes van Leuven, Geldern, Germany.
  - \* Bud-flowering: red ("mittelrot"); September–December. Foliage golden yellow. Habit bushy, upright, to 50cm tall, 50cm broad in 5 years.
  - \* Sport on 'Moulin Rouge' found at Geldern by Johannes van Leuven in September 2008: "Goldgelbe Mutation aus 'Moulin Rouge', aufrechter als 'Tessa', sonst farblich ähnlich."

#### 'Bettina'

- ® C.2010:08 registered on 1 December 2010 by Johannes van Leuven, Geldern, Germany.
  - \* Bud-flowering with long flowering spikes, white; September–December. Foliage grey-green. Habit very robust, upright, to 60cm tall, 50cm broad in 5 years.
  - \* Found in September 2007 at Geldern by Johannes van Leuven: "EU Sortenschutz als VL-07-18 oder "Bettina" beantragt".

N: after Bettina Banse.

#### 'Pink Bettina'

- ® C.2010:09 registered on 1 December 2010 by Johannes van Leuven, Geldern, Germany.
  - \* Bud-flowering with long flowering spikes, pink; September–December. Foliage grey-green. Habit very robust, upright, to 60cm tall, 50cm broad in 5 years.
  - \* Sport on 'Bettina' found at Geldern by Johannes van Leuven: "Aufrechter und längere Blütentriebe als bei 'Pink Madonna', robust, wüchsig."

#### Daboecia

#### 'Romantic Muxoll': D. cantabrica

- ® D.2010:01 registered on 31 July 2010 by Jens Kjærbøl, Bryrup, Denmark.
  - \* Flowers "double", corolla urn-shaped, 13mm long, 9mm wide, rose-pink (H7); sepals brown; 80% of flowers drop after fading; June–October. Foliage mid-green. Habit spreading, but compact: after 4 years, 30cm tall, 40cm across.
  - \* Deliberately raised seedling; parents include 'Charles Nelson' and 'White Blum'.

N: The name Muxoll is the family name of the raiser's mother.

#### Erica

## 'Manja': E. spiculifolia

- ® E.2010:02 registered on 27 March 2010 by Kurt Kramer, Edewecht, Germany.
  - \* Flowers June–July; corolla and sepals cerise (H6). Foliage dark green. Habit to 20cm tall and 20cm across after 3 years.
  - \* Cross-bred seedling raised by Kramer about 2006; propagated by Heidekulturen Marohn & Häger.

N: Manja is a Slavonic girl's name.

### 'Mila': E. spiculifolia

- ® E.2010:03 registered on 27 March 2010 by Kurt Kramer, Edewecht, Germany.
  - \* Flowers June–July; corolla and sepals lavender (H3). Foliage dark green. Habit to 25cm tall and 25cm across after 3 years.
  - Cross-bred seedling raised by Kramer about 2006; propagated by Heidekulturen Marohn & Häger.

N: Mila is a Slavonic girl's name.

## 'Raika': E. spiculifolia f. albiflora

- ® E.2010:04 registered on 27 March 2010 by Kurt Kramer, Edewecht, Germany.
  - \* Flowers June–July; corolla and sepals white. Foliage bright green. Habit to 25cm tall and 25cm across after 3 years.
  - ≉ Cross-bred seedling raised by Kramer about 2006; propagated by Heidekulturen Marohn & Häger.

N: Raika is a Slavonic girl's name.

#### 'Nadja': E. carnea

- ® E.2010:05 registered on 14 June 2010 by Kurt Kramer, Edewecht, Germany.
  - \* Flowers purple (H10): February–April. Foliage orange-brown. Habit: compact, after 3 years, 20cm tall; 30cm across.
  - \* Sport on 'Nathalie' found at Heidekulturen Marohn & Häger, Apen-Tange, about 2006: "Diese Mutante ist in Deutschland als 'abgeleitete Sorte' durch die Ursprungssorte 'Nathalie' geschützt."

#### **'Hella'**: *E.* × *darleyensis*

- ® E.2010:06 registered on 14 June 2010 by Kurt Kramer. Edewecht, Germany.
  - \* Flowers large, corolla and calyx white: November–April. Foliage bright green. Habit broad, upright; after 3 years, 35cm tall, 40cm across.
  - Seedling raised by Kurt Kramer in 1999; at time of registration stated by the registrant to be tetraploid but this is not verified by a chromosome count.

#### 'Corinna': E. carnea

- ® E.2010:07 registered on 14 June 2010 by Kurt Kramer, Edewecht, Germany.
  - \* Flowers cerise (H6): February–April. Foliage dark green. Habit compact, after 3 years 20cm tall, 30cm across.
  - Seedling raised by Kurt Kramer in 2005.

## 'Levada Gold': E. platycodon subsp. maderincola

- ® E.2010-08 registered on 17 June 2010 by David Edge, Woodlands, Wimborne, Dorset.
  - \* Foliage golden-yellow in winter, turning yellow in summer; leaves in whorls of 3, to 10mm long, about 1mm across, tapering towards apex. Flowers numerous, greenish, corolla 2mm long; style-end c. 1mm diameter.
  - \* Wild-collected, found beside a levada in Madeira by David Edge; propagated and introduced by Forest Edge Nurseries and shown at Gardener's World Live, Birmingham, June 2010.

#### 'Dave': E. cinerea

- ® E.2010:09 registered on 30 October 2010 by Johannes van Leuven, Geldern, Germany.
  - \* Corolla and calyx dark violet (H10 purple–H11 lilac-pink); July–November. Foliage midgreen. Habit upright, to  $40 \mathrm{cm}$  tall,  $40 \mathrm{cm}$  broad in 3 years.
  - \* Chance seedling, selected at Geldern by Johannes van Leuven in August 2007.

N: after David van Leuven, one of Johannes van Leuven's sons.



Johannes van Leuven's new selections of bell heather (*Erica cinerea*) named after his three sons, Tobias, David and Markus. (© J. van Leuven)

## 'Mark': E. cinerea

- ® E.2010:10 registered on 30 October 2010 by Johannes van Leuven, Geldern, Germany.
  - \*\* Corolla and calyx "rosa" (H12 heliotrope); July–November. Foliage dark green. Habit upright, to 40cm tall, 40cm broad in 3 years.
  - \* Chance seedling, selected at Geldern by Johannes van Leuven in August 2007. N: after Markus van Leuven, one of Johannes van Leuven's sons.

#### 'Tobi': E. cinerea

- ® E.2010:11 registered on 30 October 2010 by Johannes van Leuven, Geldern, Germany.
  - \* Corolla and calyx dark red (H5 ruby–H6 cerise); July–November. Foliage dark green. Habit upright, to 40cm tall, 40cm broad in 3 years.
  - \* Chance seedling, selected at Geldern by Johannes van Leuven in August 2007. N: after Tobias van Leuven, one of Johannes van Leuven's sons.

#### 'Dorset Sunshine': E. carnea

- ® E.2010:12 registered on 8 December 2010 by David Edge, Woodlands, Wimborne, Dorset.
  - \* Flowers opening lilac-pink (H11), darkening to magenta (H14) (as in 'Wintersonne'); March—May. Foliage deep golden in summer, turning lime-green in winter. Habit compact (as its parent); after 3 years, 15cm tall; 25cm across (not pruned).
  - \* Sport on 'Wintersonne' found in 2007 at Forest Edge Nurseries by David Edge; named by Kurt Kramer.

#### 'Claribelle': E. carnea

- ® E.2010:13 registered on 8 December 2010 by David Edge, Woodlands, Wimborne, Dorset.
  - \* Flowers: clear pink (same as 'Treasure Trove') with no hint of mauve; March–May. Foliage mid-green in Summer. Habit bushy, upright; after 3 years 20cm tall; 25cm across (not pruned).
  - \* Chance seedling (perhaps from 'Rosalie') found in 2007 at Forest Edge Nurseries by David Edge.
  - N: "Clear pink flower colour (pink bells)".

## 'Swindon Surprise': Erica manipuliflora

- ® E.2010:14 registered on 20 December 2010 by Richard Canovan, Toothill, Swindon, Wiltshire.
  - \* Flowers pale pink "with a hint of coral"; corolla translucent; sepals pearly white; anthers dark maroon; style strongly exserted; pedicels dusky red; late July–November.
  - \* Chance seedling before 2005, most probably from 'Toothill Mustard'; found by R. Canovan in his garden.
  - ☐ *Heathers* **8**: 40–41 (this issue) (2011).
  - # Heathers 8: 40 (this issue) 2011.

### 'Bert Jones': E. manipuliflora

- ® E.2010:15 registered on 20 December 2010 by The Registrar, The Heather Society.
  - \* Flowers white; late August-October.
  - \* Clone AWJ3 collected in Croatia by the late A. W. Jones.
  - ☐ *Heathers* **8**: 41–42 (this issue) (2011).
  - *★* Heathers 8: 42 (this issue) 2011.

N: Named after A. W. Jones, the finder, a keen student of heathers, particularly this species, and formerly the Registrar and Honorary Editor of The Heather Society.

#### Other names new to the ICRA

## Calluna vulgaris

### 'Antie'

Bud-flowering, white, September–November; foliage "mooi geel"; habit "strak opgaand". □ *Ericultura* **158**: 27 (2010).

JUVELIS DIAMANIA [trade designation]; Ericultura 158: 27–28 (2010).

JUVELIS GRANATE [trade designation]; Ericultura 158: 28 (2010).

JUVELIS LAVENDULA [trade designation]; Ericultura 158: 28 (2010).

JUVELIS PERLA [trade designation]; Ericultura 158: 28 (2010).

JUVELIS PYROPA [trade designation]; Ericultura 158: 28 (2010).

'Lunobronze': Ericultura 158: 29 (2010).

'Lunodunkelrot': Ericultura 158: 29 (2010).

'Lunogelb': Ericultura 158: 29 (2010).

'Lunohellrot': Ericultura 158: 29 (2010).

'Lunokirschrot': Ericultura 158: 29 (2010).

'Lunorot': Ericultura 158: 30 (2010).

'Lunospatrosa': Ericultura 158: 30 (2010).

TRIO-GIRLS [trade designation]; Ericultura 158: 22 (2010).

'Zippi'[orthographic error]; Ericultura 158: 21 (2010).