The age of rhododendrons at Caerhays – an update

RHODODENDRON DECORUM PINK FORM

CAERHAYS ESTATE

The rhododendron species collection at Caerhays, which was largely the result of Forrest and Wilson introductions between 1902 and 1934, came into its absolute prime here in the 1960s and early 1970s. This was just when I was starting to get interested and involved in my father's hybridisation work with Philip Tregunna, the head gardener at Caerhays for over 40 years.

In the subsequent 50 to 60 years, very large numbers of these rhododendron species have died upon reaching the end of their natural lives. The key question for large gardens with rhododendron collections in this centenary year is, therefore, at what point must the owners or curators consider starting these species off again from cuttings, seed or layering or perhaps from external purchases from the very limited number of specialist rhododendron nurseries which remain in the UK today.

There is a very real danger that many of the species discovered up to 100 years ago in China will be lost to, and maybe even because of, our generation of gardeners. With the arrival of the absurd and counterproductive Nagoya Protocol, field trips to collect and distribute rhododendron seed from the wild will become ever more difficult, if not impossible.

RHODODENDRON ARBOREUM CAERHAYS ESTATE

Thus the longevity of rhododendrons and consequent replacement plans should be an area for thought and research. The Rhododendron Camellia & Magnolia Group is seeking to collate records of surviving rare rhododendron species and hybrids but surely the rather more relevant question is how long have these plants actually got to live and what can we do now to reproduce them for the next 50 years?

My great grandfather, JC Williams (JCW), published a list of the species of rhododendrons growing at Caerhays in 1916. The further list, published in 1919, is more useful as very many more species had, by then, acquired names rather than simply collectors' numbers. The 1919 list records 333 named species and a further eleven, as then, unnamed ones.

Many of the names have of course been altered and reclassified over time but that is perhaps of less importance than determining for how long they have actually survived.

It is now time to pause and reread what my father, Julian Williams, wrote in 1976 about the longevity of rhododendrons. He was writing just before the great drought in Cornwall in the summer of 1976 which decimated all of our mature big leafed species.

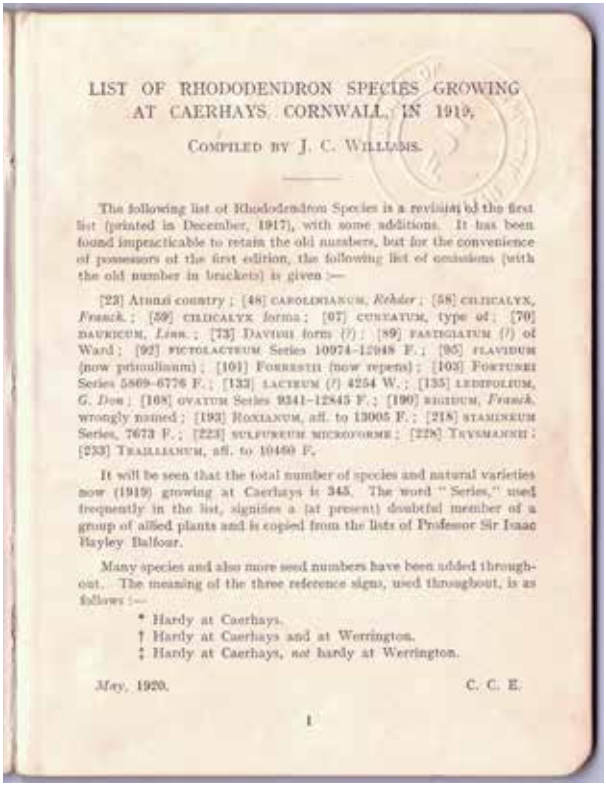
The Age of Rhododendrons at Caerhays

F Julian Williams

There is probably no more opportune time to write about the age of rhododendrons in this garden than when, after and extraordinarily mild winter, with the early magnolias in full flower, the first spring frost has struck, and the blooms have turned to blotting paper and much new foliage growth to pulp.

In this garden, which has been in existence since at least 1897, it is extraordinary how relatively few of the older specimen plants of rhododendron species have survived. The planting programme was intense between 1906 and 1934, mostly from the Wilson and Forrest collections. The losses can be explained by so many circumstances, many of which arise slowly and others as a result of sudden gale disaster, or infestation by rabbits or grey squirrels. Some plants will have been weeded out deliberately as poor forms, others will have died from neglect.

During the past few years in our planting programme, we have seen high mortality blighting our efforts – whether through honey fungus, fallen trees and branches, or by salt being carried inland from the sea by the gales. Other



LIST OF RHODODENDRON SPECIES GROWING AT CAERHAYS, CORNWALL, IN 1919.

COMPILED BY J. C. WILLIAMS.

The following list of Rhododendron Species is a revision of the first list (printed in December, 1917), with some additions. It has been found impracticable to retain the old numbers, but for the convenience of possessors of the first edition, the following list of omissions (with the old number in brackets) is given :—

[23] ATSUSI country ; [48] CAROLINIANUM, *Kelsler* ; [58] CILICALYX, *Franch.* ; [59] CILICALYX *forma* ; [67] CUNEATUM, type of ; [70] DAURICUM, *Linn.* ; [73] DAVIDII form (?) ; [89] FASTIGIATUM (?) of Ward ; [92] FICTOLACTEUM Series 10974–12948 F. ; [95] FLAVIDUM (now primuliflorum) ; [101] FORRESTII (now repens) ; [103] FORTUNEI Series 5869–6776 F. ; [133] LACTEUM (?) 4254 W. ; [135] LEDIFOLIUM, *G. Don* ; [168] OVATUM Series 9341–12845 F. ; [190] RUBIDUM, *Franch.* wrongly named ; [193] ROXIANUM, aff. to 13005 F. ; [218] STAMINEUM Series, 7673 F. ; [223] SULFUREUM MICROFORME ; [228] TSUSIMANUM ; [233] TRAILLIANUM, aff. to 10460 F.

It will be seen that the total number of species and natural varieties now (1919) growing at Caerhays is 345. The word "Series," used frequently in the list, signifies a (at present) doubtful member of a group of allied plants and is copied from the lists of Professor Sir Isaac Bayley Balfour.

Many species and also more seed numbers have been added throughout. The meaning of the three reference signs, used throughout, is as follows :—

* Hardy at Caerhays.
† Hardy at Caerhays and at Werrington.
‡ Hardy at Caerhays, *not* hardy at Werrington.

May, 1920. C. C. E.

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TITLE PAGE TO THE 1919 LIST OF SPECIES **CAERHAYS ESTATE**

reasons may lie in the fact that some plants have done too well, grown too rapidly and weakened themselves. Others may not have been cut back in time when they have become overgrown. The old *arboreums* on the drive – planted probably between 1870 and 1890 – are still cut down regularly and really appreciate savage treatment, but here again when this is not done in time, the plants tend to wither.

A planting diary was kept by my grandfather, John Charles Williams, and I have made stern efforts to satisfy myself that the plants listed below survive – though in places I may have erred or been too optimistic. This list consists only of the species rhododendrons referred to in his notes, and for the reader's convenience they have been arranged in their series.

Anthopogon series. There is one sickly plant of the rare *R. anthopogonoides*. *R. kongboense* died six years ago, and in spite of many attempts in the last sixty years it has not proved possible to establish *R. sargentianum*.

Arboreum series. A large neglected plant of the blood-red *arboreum* was recorded as looking well in 1902. In 1931, some layers of this were made, which in 1975 were looking well though straggly. Some layers from the old plant of *hypoglaucum*, made in 1927, were flourishing in 1975; plants of *thayerianum*, dating from 1919, had grown big by 1975, but were overcrowded. An *argyrophyllum* from Wilson's seed is large and healthy.

Auriculatum series. A plant of *R. auriculatum* W920, planted in 1911, seems to have reached its limit, and has not grown much since it was measured in 1948.

Azalea series. A batch of seedlings of *R. albrechtii* on the drive, planted in 1928, were cut back hard in 1968 and about half survive. *R. obtusum amoenum* was planted much of the length of the drive in 1895, and still survives harsh treatment. The white striped form of *R. mucronatum*, planted in 1933, was moved recently.

Barbatum series. Old plants of *R. barbatum* are dying back.

Boothii series. Once established, *R. auritum* grows well.

Campanulatum series has proved difficult. *Rhododendron fulgens* and *lanatum* have died out, and only one stunted plant of *campanulatum* survives.

RHODODENDRON ALBRECHTII **CAERHAYS ESTATE**

Cinnabarinum series. *R. cinnabarinum roylei*, planted in 1928, is dying back through lack of light, but big plants of *R. keysii*, planted in 1914, still look well.
Dauricum series. Plants of *R. mucronulatum* planted in 1927 are in decline.
Falconeri series. Out of 10 plants of *R. arizelum* planted in 1928 under various Forrest numbers, three survive. A plant of *R. basilicum*, planted in 1925, is dying. Six plants of *R. falconeri* were planted in 1906, of which the last died in 1960, leaving true seedlings. *R. fictolacteum* was planted in 1925, and still looks well.
Fortunei series. The original plants of *R. calophytum*, planted in 1919, have died, but they have produced true seedlings in their place. Some of 1902 planting of *R. decorum* survive; the 1918 planting look well, but they may be hybrids. *R. fargesii*, planted in 1911, are feeling their age; a 1919 planting is still holding on, but look straggly and do not like rough treatment. *R. orbiculare* planted in 1917 is going back. *R. sutchuenense*, W1232 and 1232B, planted in 1912, survive in spite of neglect.
Glaucophyllum series. *R. brachyanthum* var. *hypolepidotum*, a Forrest plant, is struggling to survive.
Grande series. Several of the big plants of *R. grande* survive from the 1907 planting, some of them re-planted in 1914 and 1919. *R. praestans*, planted in 1925, is in fair condition. *R. sinogrande* were planted in 1917, 1920 and 1931, and nearly all these look well.
Griersonianum series. Twelve plants of *R. griersonianum*, planted in 1922, survive despite grave neglect.

RHODODENDRON GRIERSONIANUM **CAERHAYS ESTATE**

RHODODENDRON LUTESCENS **CAERHAYS ESTATE**

Heliolepsis series. *R. bracteatum* W4253 flowered in 1922, but is very flower-shy though the plant looks fairly well. It may have flowered in the last 18 years.
Irroratum series. *R. araiophyllum* planted in 1922 still survive and look well, as does a plant of *R. eriogynum* of the same age; layers of this, made in 1927, look very well. *R. eritimum*, planted in 1919, survives with its ugly flowers. *R. kyawi* F17928, planted in 1924 in a cold site, survives.
Lacteum series. *R. beesianum*, planted in 1925, is dying. *R. lacteum*, *R. phaeochrysum*, *R. traillianum* and *R. wightii* have not survived.
Lapponicum series. *R. flavidum* W1773 planted in 1919; the last survivor died about 1960. *R. russatum*, planted in 1927, looks well.
Lepidotum series. *R. baileyi*, grown from seed sent home by Colonel Bailey in 1913, survives and benefits from being cut back hard.
Maddenii series. *R. burmanicum* received from Lady Cuffe grows well, but is rather bud tender. *R. crassum*, planted in 1918, forms a very good clump in spite of a tree having fallen on it. Large plants of *R. megacalyx*, planted in 1926, are now going back through overseeding. *R. lindleyi* and *rhabdotum* do quite well, while *taggianum* and *dalhousiae* are more difficult; the *dalhousiae* hybrids do well.

Micranthum series. *R. micranthum*, planted in 1920, looks well and has been cut back more than once.
Moupinense series. *R. moupinense*, planted in 1918, still survives.
Neriiflorum series. *R. apodectum*, planted in 1920, is still alive. *R. haematodes*, a clump planted in 1917 looks well. The last of four plants of *R. mallotum*, planted in 1928, died in 1962. A clump of *R. neriiflorum*, planted in 1920, is showing signs of decline. Plants of *R. forrestii* var. *repens*, planted in 1925, look fit and well.
Ovatum series. *R. ovatum*, planted in 1915, still look well.
Stamineum series. *R. wilsoniae*, planted in 1915, survives.
Taliense series. There are good plants of *R. adenogynum* L5868 and 5871, which have survived neglect. A clump of *R. bureavii*, planted in 1930, looks well.
Thomsonii series. *R. callimorphum*, planted in 1920, died about 1973. *R. meddianum* – F15676 – a batch planted in 1928 is nearing the end of its life; a difficult plant in this garden. *R. williamsianum*, W1350; the old plants are now dying.
Triflorum series. A clump of *R. augustinii* planted in 1915 is very tall and needs pruning; another planted in 1919 still survives though neglected. *R. davidsonianum* planted in 1929 exists in several different forms; the best pink form looks well, but needs more sun. *R. hanceanum* W4255, planted in 1929, has survived a cut back, but is a straggling plant in poor light. *R. lutescens*: two groups planted in 1927 survive. *R. oreotrephes*: 4 or 5 plants still survive out of a large clump planted in 1917, but they are nearing the end of their lives.

It is difficult to draw any definite conclusions from these records, other than that there seems to be little difference in the life span of the large leafed and of the small leafed rhododendrons. The *R. forrestii* var. *repens* look as healthy and well as any of the Grande series.

My father's article makes, I suspect, deliberately, deeply pessimistic reading. He, like JCW, always did his utmost to downgrade his own achievements at a time when the garden here was not open to the public and there was no need or desire to promote its existence.

There are no conclusions offered at the end of the article so, another 40 years on, I thought I might attempt several based on what we know today, as well as being a bit more positive.

I have indicated with an asterisk those species which we have replaced and replanted here afresh in the last 30 years.

RHODODENDRON STAMINEUM CAERHAYS ESTATE

ORIGINAL 'CENTENARIANS' WHICH HAVE SURVIVED AROUND, OR OVER 100 YEARS

R. arboreum (red, white, pink and blood red – but not arboreum variety 'Sir Charles Lemon')
R. albiflorum (now *R. albrechtii*)
R. amoenum (now 'Amoenum' Obtusum Group)
R. argenteum (now *R. grande*)
R. barbatum (just!)
R. balophyllum or *R. zaleucum* (now *R. yunnanense* – just alive)
R. cardioeides (now *R. oreotrephes* – a huge clump which self-seeds)
R. crassum (now *R. maddenii* ssp. *crassum*)
R. davidsonianum
R. decorum
R. delavayi (now *R. arboreum* ssp. *delavayi*)
R. dichroanthum (now *R. dichroanthum* ssp. *apodectum*)
R. discolor or *R. houlstonii* (now *R. fortunei* ssp. *discolor*)
R. fargesii (now *R. oreodoxa* var. *fargesii*)
R. griersonianum
R. hanceanum (tall growing form)
Indica series (Wilson's wild forms in various colours)
R. kaempferi (several clumps)
R. leptothrium (huge clump which self-seeds)
R. lutescens (self-seeds prolifically)
R. micranthum
R. molle (Azalea mollis)
R. moupinense (just)
R. mucronatum (several clumps)
R. mucronulatum (one plant of ten)
R. obtusum (now Obtusum Group)
R. ovatum (several clumps)
R. ponticum! (despite Defra's best efforts)
R. racemosum (pink and white forms)
R. rhombicum (now *R. reticulatum*)
R. roxieanum (one plant only – now *R. roxieanum* var. *roxieanum*)
R. rubiginosum
R. russatum (just)
R. schlippenbachii
R. serpyllifolium
R. spinuliferum
R. stamineum
R. stenaulum (now *R. moulmainense* – pink form but not white form)
R. valentinianum (just)
R. wilsoniae (now *R. latoucheae*)

MAGNOLIA MOULMAINENSE (AS *STENAULUM*)
CAERHAYS ESTATE

RHODODENDRON INDICUM (TOP LEFT) *RHODODENDRON HANCEANUM* tall form *(TOP RIGHT)*
RHODODENDRON SCHLIPPENBACHII (BOTTOM LEFT) *RHODODENDRON SERPYLLIFOLIUM (BOTTOM RIGHT)*

CAERHAYS ESTATE

THRIVING CENTENARIANS
R. MADDENII SSP. *CRASSUM* regenerating well *(TOP)*
R. KAEMPFERI flowering profusely after being cut back hard *(BOTTOM)* **CAERHAYS ESTATE**

So only about 10% of the 1919 listings exist today which is hugely significant in terms of survival, continuity and replacement.

CENTENARIANS WHICH HAVE SURVIVED BY BEING CUT DOWN HARD TO RESHOOT ONCE, TWICE OR EVEN THREE TIMES IN 100 YEARS

R. 'Amoenum' (some with benefit, some not)
R. maddenii ssp. *crassum*
R. davidsonianum
R. hanceanum (with only partial survival)
R. kaempferi
R. lutescens
R. micranthum
R. ovatum
R. racemosum (some)
R. schlippenbachii (some)

We failed to rejuvenate *Rhododendron mucronulatum* and *R. russatum* using this technique although I strongly suspect all the deciduous species would respond just as well to this treatment.

The conclusion, in very simple terms, is that any species with smooth and peeling bark and any species with thick striated bark *cannot* be cut down to reinvigorate them and prolong their life.

SPECIES WHICH WOULD PROBABLY HAVE SURVIVED AS CENTENARIANS

…if they had not been crushed by fallen trees in the 1990 hurricane or other natural disasters of this nature in the last 20 years

R. aucklandii (now *R. griffithianum*, was destroyed in a freak whirlwind in 1976.) (The Aucklandii Garden is at Caerhays.)
*R. bureavii**
*R. hunnewellianum**
*R. quinquefolium**

1919 SPECIES WHICH HAVE DIED OUT IN THE FAIRLY RECENT PAST

Aged 75 to 90 years
*R. auriculatum**
R. baileyi
*R. campylogynum**
*R. facetum**
R. haematodes (both original clumps)
*R. heliolepis**
*R. keysii**
*R. martinianum**

R. megacalyx
R. megeratum
*R. neriiflorum**
*R. niveum**
*R. orbiculare**
R. repens (now *R. forrestii* ssp. *forrestii* Repens Group)
*R. ririei**
R. sanguineum
*R. strigillosum**

CENTENARIANS WHICH STILL LOOK IN THEIR PRIME AND WHICH SHOULD SURVIVE FOR ANOTHER GENERATION OR TWO

R. 'Amoenum'
R. davidsonianum
R. grande
Indica Series
R. kaempferi
R. lutescens
R. molle
R. Obtusum Group
R. ovatum
R. schlippenbachii
R. stamineum

The 1919 lists do not include the following (mainly) deciduous species. However, because of their size and location in the garden, it can be determined that they were planted shortly afterwards, in the 1920s. These are therefore all nearly centenarians as well.
R. prinophyllum
R. luteum
R. maddenii ssp. *maddenii* (formerly *R. polyandrum*)
R. tephropeplum
R. weyrichii

With the help of Mary Ashworth, curator at Werrington Park, a review of the centenarians still surviving there and flowering today has been undertaken. At the time when the Forrest and Wilson introductions were arriving, J C Williams owned and created gardens at both Caerhays and Werrington. The Chinese Garden at Werrington on the Devon/Cornwall border near Launceston is, however, very different climatically to Caerhays. The garden faces north and is near the top of a hill with many more days of exposure to cold winds, frost, and it has 15 to 20 inches less rainfall annually.

RHODODENDRON OVATUM has been cut back to reshoot several times over the past century **CAERHAYS ESTATE**

One might therefore have expected greater longevity in many species. This is borne out by the survival, for instance, of *Rhododendron lacteum* or *R. williamsianum* at Werrington but not at Caerhays. On considering the list more closely, it is obvious that the larger leafed rhododendrons have survived the century far better at Werrington than at Caerhays. Nevertheless, there are only four centenarian species which appear on both lists.

RHODODENDRON WEYRICHII still magnificent after nearly a century **CAERHAYS ESTATE**

It could be argued that JCW perceived certain species as being too tender for Werrington's climate and that is certainly borne out in his garden notes. However, if one compares today's list of Werrington survivors, even back to a 1995 survey, it is apparent that quite a number of species have died out in the last 20 years (eg *Rhododendron arboreum*, *R. arizelum*, *R. floccigerum*, *R. irrroratum* and *R. morii*).

It seems that the overall centenarian survival rate of no more than 15% of the species originally planted is just as true at Werrington as at Caerhays.

100 YEAR OLD RHODODENDRONS STILL FLOWERING AT WERRINGTON PARK

FORREST COLLECTIONS
R. anthosphaerum (see front cover)
R. callimorphum
R. campanulatum
R. cyanocarpum
R. decorum
R. dichroanthum
R. facetum
R. fulvum
R. glischrum
R. haematodes
R. hippophaeoides
R. hormophorum/yunnanense
R. lacteum
R. neriiflorum
R. racemosum
R. rex ssp. *fictolacteum*
R. zaleucum

WILSON COLLECTIONS
R. ambiguum
R. augustinii
R. auriculatum
R. calophytum
R. concinnum
R. davidsonianum
R. floribundum
R. hunnewellianum
R. lutescens
R. pachytrichum
R. pseudochrysanthum
R. strigillosum
R. sutchuenense
R. vernicosum
R. williamsianum

WERRINGTON CENTENARIAN SPECIES
RHODODENDRON LACTEUM (TOP)
RHODODENDRON VERNICOSUM (BOTTOM)
CAERHAYS ESTATE

CONCLUSIONS

So what conclusions can we draw from all this?

- Evergreen and deciduous 'azalea' species demonstrably have the greatest longevity.
- Deciduous rhododendron species are also nearly all centenarians.
- The lifespan of some of the most attractive and highly scented species is only 20 to 30 years in our mild climate with an average annual rainfall of 55 inches. In this category I would include *Rhododendron burmanicum*, *R. lindleyi* and *R. dalhousiae* var. *rhabdotum*. The short lifespan of the latter two may well be because they are epiphytes in the wild.
- The lifespan of the majority of the later flowering scented species (and their hybrids) is a maximum of 40 to 50 years
  - *R. ciliatum**
  - *R. dalhousiae*
  - *R. edgeworthii**
  - *R. formosum**
  - *R. johnstoneanum**
  - *R. leucaspis**
  - *R. maddenii**
  - *R. veitchianum** (formerly *R. cubittii*)
- Of the smaller growing species (and their hybrids) a lifespan of 40 to 60 years is about par for:
  - *R. aureum*
  - *R. bauhiniiflorum**
  - *R. dauricum**
  - *R. ferrugineum**
  - *R. floribundum**
  - *R. hippophaeoides**
  - *R. impeditum**
  - *R. longistylum*
  - *R. minus* var. *chapmanii**
  - *R. radicans* (now *R. calostrotum* ssp. *keleticum* Radicans Group)
  - *R. sulfureum**
  - *R. williamsianum**
  - *R. vaseyi**
- 1976 drought casualties aside, some of the larger growing and larger leafed species live for 60 to 80 years and die slowly. I therefore disagree with my father's conclusion that, in broad terms, small leafed and large leafed rhododendrons have the same longevity.
  - *R. arizelum**
  - *R. calophytum**
  - *R. callimorphum**
  - *R. campanulatum**
  - *R. elliotii**
  - *R. falconeri**
  - *R. fulgens*
  - *R. hookeri**
  - *R. irroratum**
  - *R. macabeanum**
  - *R. morii**
  - *R. montroseanum**
  - *R. praestans**
  - *R. protistum**
  - *R. rex**
  - *R. sinogrande**
  - *R. wardii**
  - *R. zaleucum**
- Those species which succumbed to rust and powdery mildew in the 1980s and 1990s and would probably have lived only 40 to 60 years anyway:
  - *R. cinnabarinum**
  - *R. cinnabarinum* ssp. *xanthocodon* (at Burncoose)
  - *R. cinnabarinum* ssp. *xanthocodon* Concatenans Group*
  - *R. cinnabarinum* Roylei Group*
  - *R. triflorum*
- Those medium sized species which regularly 'overflower' here and wear themselves out by 'overseeding' and die quickly after 40 to 50 years:
  - *R. augustinii** (if not cut down to reshoot)
  - *R. rubiginosum* Desquamatum Group* (formerly *R. desquamatum*)
  - *R. keysii**

RHODODENDRON AUGUSTINII is 'rejuvenated' by regular hard pruning CAERHAYS ESTATE

NEW PLANTING IN PROGRESS IN OLD PARK CAERHAYS ESTATE

• These species dislike our high rainfall, grow poorly and die to spite our efforts:
R. falconeri ssp. *eximeum*
*R. thomsonii**
R. sargentianum
• Early Caerhays first generation (1920s/1930s) hybrids which have survived and still flourish after at least 80 years
Moonstone Group (*campylocarpum* × *williamsianum*)
R. 'Caerhays Crossbill' (*spinuliferum* × *lutescens*)
Red Admiral Group (*arboreum* × *thomsonii*)
Humming Bird Group (*haematodes* × *williamsianum*)
R. 'Penvose' (*tephropeplum* × *cinnabarinum* ssp. *xanthocodon* Concatenans Group) – cut down once

The hybrid with the most outstanding longevity is undoubtedly *Rhododendron* 'Cornish Red (*ponticum* × *arboreum*). These plants are now up to 140 years old and many, but not all, have been cut down hard but quickly recover and grow again to 40 feet or more.

Of the twenty species of dwarf rhododendrons I planted together in a bed 40 years ago only *Rhododendron campylogynum*, *R. flavidum* and *R. impeditum* survive today.

Therefore, the average lifespan of all the rhododendrons which have been planted here is around 70 to 80 years, with a very broad range either side of this. While only 10 to 15% of the wild collected and original species at Caerhays have made it to receiving the royal telegram I very much doubt any will become double centenarians except perhaps the evergreen azalea species if cut down once or twice.

On a more cheerful note, I also include a few from a list of species collected mainly by Alan Clark which we planted out last year in new clearings in Old Park Wood:
R. aganniphum (as *R. doshongense*)
R. cyanocarpum
R. farinosum
R. galactinum
R. luteiflorum
R. mengtszense
R. pachytrichum
R. vernicosum
R. strigillosum
R. taliense

CHARLES WILLIAMS
is the current custodian of Caerhays Castle Gardens and owns Burncoose Nurseries