

Issue No. 29

February 2011

Friends of Thwaite Gardens Newsletter



PLANT OF THE MONTH - SNOWDROP (*Galanthus nivalis*)



The snowdrop must be one of the most familiar and best loved of flowers in the British garden, so it might come as a surprise that there is considerable doubt as to whether it is a true British native. The plant is native to the nearby continent but it is thought that it may have been introduced to Britain as a religious symbol fairly early in history. Certainly it is particularly common in churchyards and everyone with an interest in flowers knows of a favourite spot where in February, the snowdrop carpets the ground and lifts the spirits, signalling the beginning of the end of winter. My two favourite places for snowdrop pilgrimage are Givendale church and Everingham church. Neither place has exceptionally large numbers of the flower but the settings seem so perfect and somehow “sacred”.

The Latin name means “milky flower of the snow”. Another popular name is “Fair Maids of February”, this being the month when the flowers usually first appear and are at their freshest. It is thought that the flower was originally adopted as a Christian symbol for Candlemas (2nd February). This time of year also had a great significance in the pagan Celtic calendar as the time when the pulse of life began noticeably to “quicken” after the dead slow of winter. It is also American “Groundhog Day” when it is said that if the emerging groundhog can see its own shadow, it retreats back

into hibernation in anticipation of further cold weather. There is also the old English saying –

“If Candlemas day be fair and bright, winter will have another flight; but if Candlemas day be clouds and rain, winter is gone and will not come again”.

I believe similar versions of the saying are known across Europe, all of which seems to add up to the same thing – that there is something particularly significant in the weather pattern at this time of year as a portent for an early or late spring.

Whatever the history, the snowdrop is completely naturalised. The plant reproduces mostly by vegetative means rather than seed, which explains why the double variety (*G. n. 'Flore Pleno'*) is almost as common as the single type in woods and gardens. For connoisseurs there are a number of named and arguably “improved” forms available. However, personally, I find after viewing snowdrop collections of this sort, asking myself “why”?

There are other species too. I particularly like *Galanthus elwesii*, which has stronger leaves and particularly early, often robust flowers. It seems to thrive on drier poorer soil than *G. nivalis*.

Then there is the vexed question of transplantation and propagation. Many gardeners will have heard that *Galanthus* must be transplanted “in the green” (i.e. in leaf). However experts say that this is a complete myth; snowdrop bulbs like all others are best dug up and moved when dormant.

However, it is also true that the dehydrated wizened little bulbs often offered at garden centres have even less chance of success. So if you want new snowdrops, dig them up when dormant but don't leave them lying about and avoid those sad unlucky little bulbs languishing on the shelf, unless you enjoy nursing hopeless cases back to health!

John Killingbeck

OPEN DAY 2011 - 22nd MAY

Following another very successful open day last year, we are now busy preparing for this year's event and hope that as many Friends as possible will be willing to lend a hand.

There will again be a plant stall with a wide variety of plants for sale. Donations of plants from Friends would be welcome.

There will be the usual refreshments served from 11 am in the corridor, and we would very much welcome contributions of home baking to this stall, as it usually goes down very well!

Other ways in which you can help to make the day a success are:-

Welcoming visitors

Handing out brochures

Manning the plant stall

Assisting with refreshments

Signing up new members

Taking admission fees

Please indicate your preference and the time which would suit you best on the accompanying loose leaf form and return it to the Secretary, Pam Bailey – contact details at the end of this newsletter – or drop it in to the greenhouse block at the Botanic Gardens.

Admission to the Open Day is free to members and for non-members is the very reasonable price of £1.50, so please tell all your family and friends about the event and let's try and make this year's Open Day even more of a success than last year

TREES OF THWAITE No. 9:- The TRUE SERVICE TREE or WHITTY PEAR (*Sorbus domestica*)

Continuing the theme of native trees of which the lime was the subject in the last newsletter, this time I will introduce the plant that might rightfully be described as the most obscure native tree in the British flora. Indeed until very recently there has been much doubt as to whether this tree should be considered native at all.

The reasons for doubt are several. Firstly, the tree's general wild distribution is well to the south of Britain mainly in southern Europe. Secondly, those specimens that have been planted in Britain (and it is by no means commonly grown) rarely seem to produce viable seed. Thirdly, as a wild plant, it has for centuries been known only from a single specimen growing in the Wyre forest – an ancient woodland site in Worcestershire.

However, this one Wyre forest specimen excited the curiosity of antiquarians for generations and there are written accounts of its existence going back to the 17th century. For, it seemed to many who observed it, that such a unique tree growing in so isolated and wild a spot was very unlikely to have been planted; and to what purpose? Furthermore, even long ago, the tree was obviously of great antiquity. So for centuries the Whitty Pear remained an inexplicable curiosity. The fact that the tree was deliberately destroyed in the mid 19th century perhaps only served to enhance its mystique, although by this time a few grafts had been made of the original which still survive today.

So the situation remained until the very late 20th century when, out of the blue, on some inaccessible crags, several dwarfed and stunted specimens, estimated to be over 1000 years old were discovered in South Wales. Genetic analysis indicated that they were much closer in type to the remaining ex Wyre forest grafts than to trees from the continent. Here then was the final proof that the species was indeed native, had probably once been more widespread, and had survived as tiny relict populations in the south west and miraculously also in Worcestershire.

One might then ask, how the new trees remained undiscovered for so long in so heavily botanised a country as England? Probably they were mistaken by earlier botanists for common rowan trees (*Sorbus aucuparia*). Superficially the True Service Tree is very similar to rowan and is closely related. The foliage, except in detail, is almost identical. The buds however are greenish rather than brown. Also, fruits are green rather than red and the bark cracked and rough, a bit like a pear, rather than smooth like a rowan. However these last two features would hardly be noticeable in stunted specimens that rarely fruited.

The other question of course is how the species came to grow wild in England well north of its general European distribution. The answer is likely to be the same as that which accounted for wild lime (as discussed in the last newsletter); namely that the tree flourished in the warmer climate that existed here several thousand years ago. As the climate cooled towards today's level, the tree declined to the point of near oblivion, with just a few individuals hanging on for centuries in places where competition from more cold tolerant species was minimised by unusual local conditions.

I am sometimes asked if I could indicate whereabouts in Thwaite gardens the trees discussed are to be found. In this instance, even detailed instructions would be of little use. Our true service is one of those many interesting trees regrettably languishing in the woods adjacent to the railway, where it struggles for light and space, so is quite hard to identify. However for those who are keen to see the species, a good example grows in the Museum Gardens, York, clearly labelled and cared for. People of a scholarly bent may be interested to know that the curious name "whitty" is apparently a variant of local names for rowan, but that "service" has a more ancient and esoteric linguistic root.

One final point of interest about this species is that it is known to occur in two distinct fruiting types; 'pyrifer'a'-with pear shaped fruits and 'pomifer'a'- with apple shaped fruits. Offspring of each is interchangeable. The Thwaite and York trees are both pomifer'a forms.

John Killingbeck

OPENING TIMES REMINDER

*The Gardens are open to Friends on **Mondays to Thursdays from 12.30 to 3.30 and Fridays from 12.30 to 3.00** (except Bank Holidays and other times when the University is closed)*

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Diary Dates!

29TH MARCH 2011 –TALK BY MEMBER
OF STAFF FROM WESTSHORES
NURSERIES (Ornamental grasses
specialists) – subject TBA
22ND MAY 2011, OPEN DAY
4TH OCTOBER 2011 - AGM
31ST JAN 2012 – TALK –SUBJECT TBA

ALIEN AND OUT-OF-PLACE AQUATIC PLANTS AT THWAITE LAKE

The *Friends of Thwaite Gardens Newsletter* (September 2009) has included articles by Keith Allison and Joe Garner that feature conspicuous alien plants growing at Thwaite Lake and its inflow channel; notably Indian Balsam (*Impatiens glandulifera*), Japanese Knotweed (*Fallopia japonica*) and Giant Hogweed (*Heracleum mantegazzianum*). These are aggressive invaders and control of them has been undertaken. The present article looks at other, less conspicuous, aquatic and wetland plants that are either aliens or are out-of-place, being native species that are probable introductions at Thwaite Lake. Ornamental alien species that have obviously been planted are not taken into account.

There are several sources that provide information about which water and wetland plants were present in and around the lake during the twentieth century:

- A list of herbs recorded in Thwaite Gardens, probably from the 1980s, published by the Cottingham Civic Society in 1988 (*A Brief History of Thwaite House and its Estate*, compiled by Pat Raine). This includes freshwater and wetland plants.
- An unpublished sketch map provided by Anne Braithwaite, formerly on the staff of the University Botanic Garden, which probably dates from the 1950s or 1960s and shows a bog garden that then existed at the western end of the lake; this indicates the location of named water and wetland plants that had been planted in the bog garden.
- Specimens in the herbaria at Hull University and Hull Museums collected from Thwaite Gardens between 1929 and 1985.

Table 1 lists water and wetland plants that are indicated by the above sources to have been present at some time during the twentieth century but which may well have been introductions for one or more of the following reasons: (1) they are shown as plantings on the sketch map, (2) they are non-native, (3) they are unusual plants in the wild in this part of East Yorkshire, (4) they are plants more usually associated with acid, upland or brackish habitats, (5) they were amongst species cultivated for research into plant physiology at the University Botanic Garden (Justin S.H.F.W. & Armstrong W., *New Phytologist* 106, 465-495, 1987) some of which were planted out in the bog garden in the

mid-1980s. Most of these probably-introduced plants have not survived; I recorded only seven of the 24 species listed in Table 1 during the summers of 2008-2010. It is likely that many of them were inherently unsuited to the environmental conditions at Thwaite Lake and/or were out-competed by more vigorous naturally-occurring species.

Also recorded over the summers of 2008-2010 were several alien freshwater and wetland plants that appear not to have been recorded at Thwaite Lake until the twenty-first century. These include the now widespread Indian Balsam. Also conspicuous along the south margin of the lake, and of considerable botanical interest, is the Giant Reed (*Phragmites australis* var. *gigantissima*). This reed, which is a variant of the Common Reed (*P. australis*) reaches a height of 4 metres. It is an octopolyploid with its origins in the Danube Delta (Raicu P., Staicu S., Stoian V. & Roman T., *Hydrobiologia* 39, 83-89, 1972) that was cultivated at the University Botanic Garden and introduced into the lake in the 1990s.



Giant Reed (*Phragmites australis* var. *gigantissima*) at Thwaite Lake, September 2010.

In summer 2008 and 2009 several plants of the alien Red Cowslip (*Primula pulverulenta*) from China, a conspicuous candelabra primrose with mealy flower stalks and red flowers, had become naturalized in the marshy area between the island and shore at the west end of the lake. These probably originated from plantings of primulas that are referred

to in the anonymous early 1970s *Botanic Garden and Experimental Ground: Descriptive Guide to the Gardens and Glasshouses* published by the University Botany Department. This appears to be the first record of this plant becoming naturalized in Yorkshire; it is not recorded for the county in the *Vice-County Census Catalogue of Vascular Plants of Great Britain* (Stace C.A., Ellis R.G., Kent D.H. & McCosh D.J., BSBI, 2003). This plant was not re-found in summer 2010 following dredging in autumn 2009 to restore the island, an integral landscape feature of the English Heritage listed Victorian gardens.



Red Cowslip (*Primula pulverulenta*) at Thwaite Lake, May 2008.

In summer 2010 a single plant of the sedge Pale Galingale (*Cyperus eragrostis*) was found in a waterlogged flower bed adjacent to the south side of the lake. This is an alien from North America, planted as an ornamental and sometimes originating in wool or seed mixes, which is sometimes naturalized in England. It is not yet formally recorded for East Yorkshire although I have in summer 2010 seen this plant naturalized at North Cave Wetlands and it has appeared in my Beverley garden adjacent to a bird feeder.



Pale Galingale (*Cyperus eragrostis*) at Thwaite Lake, September 2010

The observations described herein demonstrate that alien and out-of-place plants are not usually threatening or invasive. Most of the aquatic and wetland plants that appear to have been introduced to Thwaite Lake during the twentieth century have now been lost. The author would be interested to hear of any that are re-found.

Table 1. Water and wetland plants that were probably introduced to Thwaite Lake during the twentieth century

Blue Iris (<i>Iris spuria</i>)
Bogbean (<i>Menyanthes trifoliata</i>)
Brooklime (<i>Veronica beccabunga</i>)*
Bulrush (<i>Typha latifolia</i>)*
Common Club-rush (<i>Schoenoplectus lacustris</i>)
Galingale (<i>Cyperus longus</i>)
Greater Spearwort (<i>Ranunculus lingua</i>)
Greater Water-parsnip (<i>Sium latifolium</i>)
Lesser Spearwort (<i>Ranunculus flammula</i>)
Mare's-tail (<i>Hippuris vulgaris</i>)

Marsh Cinquefoil (*Comarum palustre*)
Marsh-marigold (*Caltha palustris*)*
Marsh Pennywort (*Hydrocotyle vulgaris*)
Monkeyflower (*Mimulus guttatus*)*
Narrow-leaved Water-plantain (*Alisma lanceolatum*)
Pendulous Sedge (*Carex pendula*)*
Sea Club-rush (*Bolboschoenus maritimus*)
Slender Rush (*Juncus tenuis*)
Soft-rush (*Juncus effusus*)*
Sweet-flag (*Acorus calamus*)
Water Avens (*Geum rivale*)
Water Dock (*Rumex hydrolapathum*)
Water-soldier (*Stratiotes aloides*)
Yellow Iris (*Iris pseudacorus*)*

*Still present in 2008-2010.

Nomenclature follows *New Flora of the British Isles* (Stace C., Cambridge University Press, 2010).

Ray Goulder (r.goulder@hull.ac.uk)

Helpers always needed for all the ongoing project work. This need not be anything strenuous, it might just be watering or weeding and could be done any time during the normal University working week.

BOB THE CHEEKY ROBIN



I am a little robin and I'm sitting on your bin,
I am waiting for some mealworms as the weather has
been 'grim'.
The snow and ice look pretty, but I have to stay alive,
I am relying on you humans, without you I can't
survive!

I am a little robin and I'll sing a song so sweet,
I'll sing an extra verse if you'll 'hand me' one small
'treat'.
I am a cheeky fellow, but so lovable, I know,
The gardeners little feathered friend, around your plot
I'll go.

I am a little robin, and I'm waiting for the 'spring',
For the flowers and the sunshine, the new life to begin.
I am just a 'bobby' robin, and this garden is MY
home,
And YOU, my friend the human, make me feel 'I'm
NOT ALONE!

By Heather Overfield, Cottingham

**OPEN DAY
22ND May**

***Doug Stewart will be
on site 11.30 – 2.00 to
answer any questions
or queries on an
informal basis***

We welcome contributions to the newsletters from all members, so if you have any articles, ideas, photographs, letters etc which you think would be of interest or would provoke discussion, please send them to the Newsletter Editor at the address above.

Note: Articles are published on the understanding that they represent the views of the writer.

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