

THE GRESFORD YEWS

Compiled by Tim Hills from information collected by Allen Meredith and Reg Wheeler

The Gresford Yews have received attention for at least two hundred years. As well as this large ancient specimen, pictured in the 1833 *Magazine of Natural History*, there are a number of younger yews with a known planting date. This gives an indication of the growth rate of younger yews in this churchyard and perhaps some insight into the rate of growth of the ancient yew when in its youth.



The table below, more comprehensive than for most old yews, allows for a comparison of growth rates at different heights.

	ground	at 1'	at 2'	at 3'	At 4'	at 5'
1808 Daniel		22' 6"				27' 9"
1833 J.E.Bowman	22'		23'	29'	26' 6" at 4' 5"	Nearly 29' at 5' 3"
1843 Archaeologia Cambrensis					30'	
1878 Sir Robert Christison	22'		24' 9"		28' 2"	
1916 Edward A.Fishbourn	23' 3½"					
1961 Alan Mitchell						29' 6"
1980 Allen Meredith			27' 7"		29' 7"	

The earliest known record of the ancient yew is in **1801** when *The Orthodox Churchman's magazine; or a treasury of Divine and Useful knowledge* reported:

“.....the great yew tree now growing in the churchyard at Gresford, in North Wales, which is nine yards and nine inches.”

In **1813** *Rural Sports*, William Barker Daniel is the first to mention the younger yews:

“In the churchyard at Gresford.....are growing nineteen Yew Trees. The dimensions of one of them was taken in May 1808, and it is mentioned as a most singular Vegetable Production—the circumference of the Body (or bole) of this said Yew Tree, one foot from the ground, is the enormous size of seven yards eighteen inches; at five feet from the ground, is nine yards nine inches; two of the great arms are dead, and two more are following rapidly, yet there still remains a sound Body, and seven large Arms that are still in a thriving state; and probably will survive another Hundred Years, before it will drop amongst the Graves of the Dead, which it has so many Centuries shaded. This tree has stood in the reign of seventeen Kings, three Queens.....”

1833 *Magazine of Natural History* edited by Loudon, Charlesworth and Denson
The following description forms part of J.E.Bowman’s theory *On the Longevity of the yew*:

“It is a male tree, its trunk sound to the very core, its numerous gigantic boughs spreading widely, full of foliage, and partially concealing the splintered bases of others which have yielded to the storms of past centuries. Its circumference at the base is 22 ft.; at 2 ft. high, it is 23 ft.; at 4 ft. 5 in., 26 ft. 6 in.; and at 5 ft. 3 in., being just below the main boughs, 29 ft. very nearly, thus gradually thickening upwards..... Now, as there are eighteen yews growing in the same churchyard, whose ages are known, and whose average diameter, at 120 years old, is 20 in., we cannot do better than to assume that the great yew now under consideration had a similar diameter at that age, and we find its present age, by the nearest approximation at which we can arrive, to be 1419 years.”

1836 *The Edinburgh New Philosophical Journal* p345

“From three sections obtained from this tree, Mr Bowman ascertained that the average number of rings deposited from one inch in depth of its latest growth, was $34\frac{2}{3}$. Comparing this with the data obtained from the eighteen young trees, he estimated the probable age of this tree at 1419 years.....and its trunk is 22 feet in circumference at the base, 29 feet below the first branches. This gives us a mean diametre of 1224 lines, which according to De Candolle’s rule for estimating the age of the yew, ought also to indicate the number of years.”

1838 *Arboretum and Fruticetum partIII*

Bowman observed that most of the yew’s seven main branches divided again, very near the trunk, into two or three smaller ones. He described a noble tree “still full of foliage, and of great beauty, as well as venerable for its size; and it shows no symptoms of natural decay.”



In 1999 the “seven large Arms” continue to thrive. I counted at least 8 branches that might merit such a description.

1844 In this year the yews that were planted in 1727 had an average girth of 4 feet.
Archaeologia Cambrensis

1845 *Excursions in North Wales* p62 Croesffordd ‘the way of the cross’ Gresford

“A yew tree in the churchyard has attracted more notice than the church itself. Its girth is almost 30 feet, and botanists have fixed its age at more than 2000 years.”
(also in the *Gentleman’s Magazine* p116 1847)

1851 *Haydn’s Dictionary of Dates*

“Its circumference was nine yards and nine inches, being the largest and oldest yew-tree in the British Dominion.”

1874 *Archaeologia Cambrensis*

“Among the yew trees in the churchyard, planted in 1727, is an enormous one which in 1843 measured 30 feet round at 4 feet from the ground.”

1912 *The Village at Gresford* by G.S.Jarman

In the churchwardens accounts under the date 1710, there is an item, “Paid to John Powell, for watering and hedging about the young yew trees, 2s.”

In one of the registers of births is the entry “mem.: that in the year 1726 there were 25 young yew trees planted in the Churchyard.”

1984 2nd February Reg Wheeler visited Gresford churchyard. His intention was to record essential measurements, hoping to provide a concise inventory together with sex and position of each tree. He also produced what he described as “an attempt at calculating (or speculating) the age of the ancient specimen in the following tables.”

Table 1

	(1)	(2)	(3)	(4)	(5)
Ht. Of recorded girth	1836 Bowman (radius)	1984 Wheeler (radius - cm)	Radius increase	Years	Estimated age – $\frac{(2) \times (4)}{(3)}$
Ground	106.6cm	122.7cm	16.07cm	148	1130 years
2 ft	111.7cm	133.8cm	22.10cm	148	896 years
4 ft	128.4cm	147.5cm	19.10cm	148	1142 years
5ft	140.5cm	168.7cm	28.20cm	148	885 years

Range is 885 years to 1142 years, averaged out gives an age of 1015 years.

Reg Wheeler also obtained annual ring counts from 8 samples, finding that they ranged from 11 to 48 rings per inch – making an average of 31 rings per inch or per 2.54 cm.

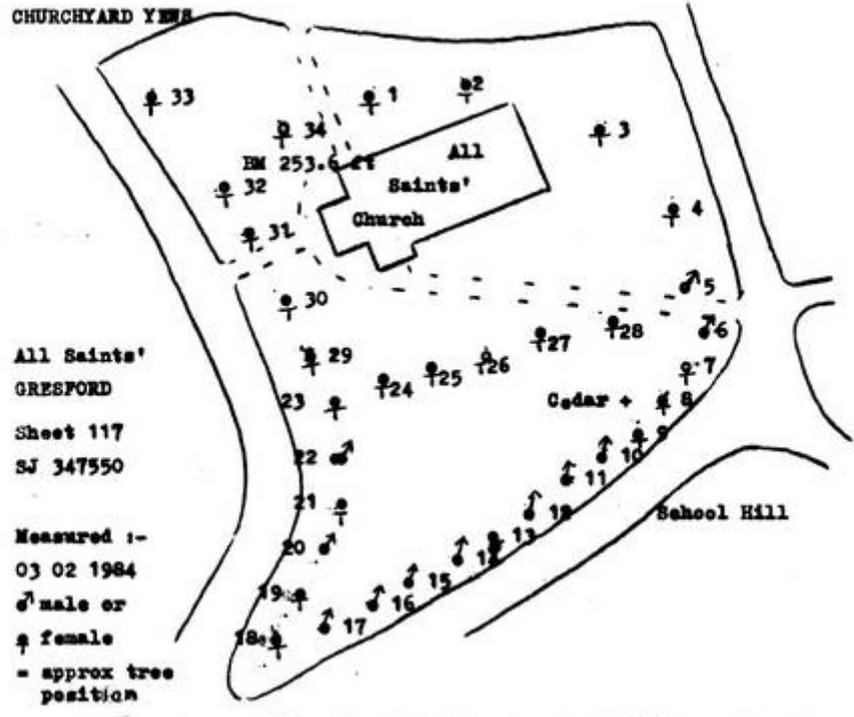
Table 2

Total radius	122.7cm (48.3in) at the ground x 31 rings per inch =	1497 years
	133.8cm (52.6 in) at 2 feet x 31 rings per inch =	1633 years
	147.5cm (58.1in) at 4ft x 31 rings per inch =	1800 years
	168.7cm (66.4in) at 5ft x 31 rings per inch =	2058 years

Range is 1497 to 2058 years or 6988 divided by 4 = 1747 average i.e. about 1750 years

“You can take your choice as required to impress your audience! Alternatively you can show how difficult (or foolish) it is to estimate the age of a tree. This is why accurate historical records of planting dates and measurements are so helpful.”

Reg Wheeler's plan of Gresford Churchyard, 1984
 Tree 5 is the ancient yew



1. 165cm @ 70cm	10. 170 @ 15	20. 200 @ 20	30. 233 @ 40
2. 281 - grd	11. 128 -140	21. 205 - 35	31. 232 - 35
3. 278 - 30	12. 227 -120	22. 295 - 15	32. 235 - 35
4. 317 - 10	13. 113 -145	23. 180 - 35	33. 201 - 30
* 5. See below	14. 175 - 90	24. 186 - 10	34. 292 - grd
6. 358 - grd	15. 195 - 40	25. 250 - 30	
7. 258 - 35	16. 161 - 70	26. 242 - grd	
8. 165 - 95	17. 127 - 90	27. 278 - 40	
9. 180 - 117	18. 196 - 10	28. 275 - 30	
	19. 294 - 15	29. 201 - 40	

Reg Wheeler 1984



More recent visits have been carried out by Tim Hills, Allen Meredith, Trevor Baxter and Andrew Morton. Morton, in his *Tree Heritage of Britain and Ireland* (1998), described the “celebrated male yew” standing “gloomily behind iron railings.” While an apt description, it is a wise precaution to protect a tree that has already suffered fire or smoke damage. I could not see clearly into the centre of the tree, but it appeared that brick and concrete slabs lay in its decaying heart.

In 1912 *The Village at Gresford* notes a church record of 25 young yews planted out in 1726, so we must assume that 7 of these failed to thrive, since only 18 are mentioned in the accounts of 1813 and 1836.

We know then that the 33 younger yews recorded by Reg Wheeler came from more than one planting. Unfortunately, unless we know precisely which trees formed part of the original 1726 planting, the younger yews in this churchyard can no longer be of any use as indicators of growth rates.

An additional factor for consideration is that we do not know how old the trees were when they were planted out. Was the sum noted in the churchwardens accounts under the date 1710: “Paid to John Powell, for watering and hedging about the young yew trees, 2s.” for the trees eventually planted out in 1726? There is also the account of 1833 which describes the trees as 120 years old – which would have dated them back to 1713?

Furthermore we do not know how many more of the original 1726 planted trees have been replaced, or the planting dates of the later additions to this fine collection of churchyard yews.

One thing we do know about yews is their ability to survive beyond 1000 years. The 1813 account suggested that the ancient tree would probably survive for another hundred years! We now know that hundred can be replaced with the word thousand.

The last word on age should go to Trevor Baxter, who in *The Eternal Yew* (1992) described the ancient tree as “one of the best known trees in Britain, with much speculation about its age.” He noted estimates ranging from 850 to 1734 years, based on “girth, ring counts from bore holes or decayed wood and imaginative perception.”