

Ancient Yew in Upland and Cliff Habitats in the UK - New Research

by Paul Greenwood



My interest in yew trees began in 1991 upon a mountain called King's Howe in the Borrowdale valley, south of Derwentwater in north west Cumbria, England. My curiosity was kindled for photographic reasons due to some beautiful and unusual looking red 'berries' on an evergreen tree and the unripe green ones almost exactly resembling tiny oak acorns.

After discovering the tree's identity was yew, I mentioned it in passing to a friend who promptly gave me a copy of *Kindred Spirit* magazine (Winter 1991) containing an article by Anand Chetan which introduced me to the controversial work of Allen Meredith; claiming that some yew trees growing in Britain were thousands of years old. Needless to say I was rather astonished at this introduction and became keen to learn more about his theories. I contacted Allen Meredith in 1992 to gauge his interest in these small mountainside yew growing in the Borrowdale valley and if any could be possibly relevant to his work. His positive response led me to look for more typically ancient-looking (i.e. bigger) yew.

Since my work at that time as a freelance photographer took me to many obscure ancient sites in northern Britain, I was able to photograph and document many potentially notable or ancient yew I found, together with any possibly relevant history of the location, and pass the information to Allen Meredith. In 1994 *The Sacred Yew* by Anand Chetan and Diana Brueton was published featuring his work. Anyone who knows this seminal book will appreciate that it is both compelling, comprehensive and controversial. It revealed that Alan Mitchell (1992 - 1995 and founder of the *Tree Register of Britain and Ireland*), after becoming increasingly interested in potential yew antiquity himself, (via corresponding with Allen Meredith in the late 1980's), considered it entirely possible that wild, stunted yew on the storm swept and barren Ardnamurchan peninsula (the westernmost point of the Scottish mainland) could be truly ancient. This was despite their size; with relatively small girths of around 12ft (3.5 m approx.). By 1994 Alan Mitchell had concluded that "There is no theoretical end to this tree, no need for it to die"*.

* - Interview with John Craven, presenter of BBC 1's *Countryfile* series, 1994.

An image on p.165 of *The Sacred Yew* is significant to my argument. It is unfortunately incorrectly captioned as being one of 'the' Borrowdale Yews (made famous by William Wordsworth in his 1803 poem *Yew-Trees*) when, in fact, the tree is found 4 miles to the south, and standing at an altitude of about 900 - 1000 ft (300 m.) upon a scree slope in an area known as the Jaws of Borrowdale (see Fig. 2 below).



Fig.2 - Upland yew at LowScawdel, Borrowdale.
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I would like to concentrate upon this particular wild yew because in 1999 it gave a whole new focus to my research. I was in Borrowdale at Midsummer that year and the fine weather necessary to safely access these sites allowed me to have a closer look at it and four others nearby on the hazardous lower eastern slopes of High Spy mountain; an area of sheer cliffs consisting of jumbled, unsteady boulders and loose scree. I was also able to visit some others on the opposite side of the valley upon Grange Fell and King's Howe where there are not only single trees but also groves of densely packed yew (see Fig. 3 below) with small trunks, some growing at heights approaching the 500 m contour, and thus way above 1000 ft.



Fig. 3 - Densely packed groves of small yew, which appear as one tree when viewed from a distance, growing high upon King's Howe, Borrowdale, Image copyright © Yew-Trees/Paul Greenwood.

In the autumn of 1999 I received some feedback about these yew from Robert Bevan-Jones (author of *The Ancient Yew*, Windgather Press 2001) and, in his opinion, unless they were just as they looked on paper, i.e. young, wild, self-seeded yew, he thought they could be "unique as specimens" and his comments inspired me to pursue further enquiry. More feedback came from Allen Meredith which was far more controversial to me - but extremely exciting nonetheless - because in his opinion based on the further images I had provided (see Fig. 4. below), the standalone yew on Low Scawdel looked like it might be 3000 years old, in spite of it having a mere 9 ft. (275 cm) girth! Furthermore, he suggested that this tree could be an ancient remnant of a root system established immediately following the last Ice Age as soon as local conditions permitted - and is still surviving. If his incredible proposition could ever be proven it would mean that a yew root system has been here for perhaps 10,000 years and, moreover, *continually* regenerating "new" trees from the rootstock. An eternal life indeed - *if so*.

Though my initial reaction to Allen Meredith's estimation was highly sceptical, it did not mean it was impossible - just lacking evidence - and was well worth looking into further. The implications were huge however; for here were what looked like ancient yew of small girth in remote areas of Britain.

Little attention had apparently been paid to them or the possibility of their being of major botanical importance, simply because the trees in question are small and stunted in comparison to a 'typical' ancient yew e.g. of 20ft (6.0 m) girth or more. In essence they were the *opposite* of what is understood to constitute a typical member of the ancient yew heritage living in Britain. Wordsworth's Borrowdale Yews, undoubtedly ancient, grow in this same valley, and are large specimens. It raised the question in my puzzled enthusiast's mind as to how could yew be so different in girth size and both be ancient **. Furthermore, if both were, then what was limiting the growth of the smaller ones? Or was their growth not 'limited' at all? Was this a human thought construct being imposed upon them when in reality ancient yew can be all shapes and sizes? Ancient yew has always been considered as large but perhaps we should be accepting that 'ancient' can come in all shapes and sizes - depending upon habitat. And that in the world of yew a minimum size is perhaps no barrier to having a venerable life.

** - A provisional dendrochronological analysis by Andy Moir of Tree Ring Services UK at the Borrowdale Yews in June 2004 confirmed that these trees are ancient. However, the basic field analysis based on growth comparisons elsewhere, using especially written and developed computer programs created to predict how a yew has grown in the past in the absence of countable rings due to hollowing, strongly suggested that the yew with the largest girth (23 ft 10 in. or 727 cm.) was 1000 years old, and the one with the *smallest* (19 ft 6 in. or 594 cm.) perhaps 1500! A full analysis of this site and others examined since is expected to be published by Tree Ring Services UK in 2006.



Fig.4 A closer look at the tree in Fig. 2 above showing typical signs of ancient yew and how harsh the terrain is where it survives.
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It is worth mentioning that both yew and juniper, with Scot's Pine, are the only true native conifers of Britain and which helped to pioneer the reforestation of many areas in a mild 'climate window' immediately following the last Ice Age. This affected Cumbria and lasted for around 2000 years before it became gradually colder again on an average basis until the sudden temperature rises of the last few centuries and particularly since the 1980's. Thus any yew established on the first exposed land at that considerably warmer (and wet) time over 8000 years ago, and any progeny generated by seed (or new trunks generated afterwards directly from rootstock), would have had to adapt to increasingly harsher and slowly deteriorating comparative conditions, marooned in what was a seemingly better habitat originally. Juniper trees are also found on the mountains of Borrowdale, often adjacent to yew, but no dendrological analysis has been completed yet as to whether these trees themselves could be very old or ancient in terms of the average life span of the species- but if any are then they are obviously just as essential to protect as the yew.

The obvious factors to begin with when considering this conundrum are a combination of climate, altitude and habitat type - including in the case of many of the upland trees this means having virtually no soil at all, and even that is mainly inhabited by bracken. There is also the presence of sheep, and especially deer, browsing on yew. Furthermore, many of these yew do not have any other trees around them. Hence there are no shade factors from other trees to consider which might perhaps influence slower growth and possibly limit a 'typical' size based on girth to age formulas developed so far (which can only *estimate* yew ages in the sense of being a guide, a *starting* point, for age consideration).

The slopes of King's Howe (see Fig. 5 below) and Low Scawdel in particular are littered with dead oak, ash and silver birch smashed to pieces by rockfalls from above, or have been blown down by winds long before reaching natural maturity. Much of the Borrowdale valley was also denuded of viable and accessible timber in the late 16th and 17th centuries for industrial purposes. Natural regeneration is well managed by the National Trust throughout the lower reaches of the eastern valley, but higher up is a slow process both in terms of tree recruitment and also sustainability. There are only the yew and juniper and an occasional holly (or ash, although it is not a long lived tree anyway with a lifespan around 150 years, unless pollarded) seem to have survived for the length of time necessary to reach maturity and old age in these most exposed conditions. Hence Borrowdale clearly demonstrated in microcosm what could also exist - and was seemingly being overlooked - in similar rocky environments all over the UK, especially in the ancient mountainous areas of northern England, Scotland and Wales.



Fig 5. Yew surrounded by fallen rocks and scree, King's Howe, Borrowdale.
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Unlike many areas of limestone, where yew occur in upland and cliff environments (and often quoted as being a preferred habitat for yew) the rocks of Borrowdale are volcanic shales and granites and amongst the oldest in Britain, particularly in the Jaws of Borrowdale. Unlike limestone, they contain no organic remains at all and are exceedingly slow weathering by precipitation. Incidentally it was from this very location that stones were taken to build the magnificent Castlerigg stone circle, just east of Keswick which, in origin, is older than Stonehenge. It seemed feasible to consider, given the apparently nutritionally poor habitat of the Borrowdale mountains, that the great age estimated by Allen Meredith for one of these trees could be achieved if extremely slow growing and also being stunted by the harsh and exposed conditions. It is also possible that damage by rockfalls could well induce shock and a period of virtually no girth increase whilst energies were centred on structural compensation and repair, i.e. healing.

I have witnessed a particular yew on Low Scawdel crushed underneath a boulder weighing tens of tons and the size of a small car. Yet despite the huge impact and shock the yew has survived and is thriving, having extended branch growth laterally along a bare rock face and out from under the slab which crushed it. Further enquiries appeared to confirm it likely that the potential of these yew to be ancient had indeed been virtually undetected and unrecognised as a comparatively *widespread* natural phenomenon in Britain.

In 2002 came the breakthrough I was looking for - and hard evidence confirmed that such yew populations did contain trees which were exactly what they were suspected to be - small, yet ancient, and that they existed *throughout* Britain, not just in 'remote' areas.



Fig 6. Torn by the wind or smashed by rockfalls? The upland yew of Low Scawdel, Borrowdale are survivors indeed.
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Due to my pursuit of this specific branch of yew potential I had earlier received a copy of an article regarding ancient stunted trees on cliffs, published in *Nature* (Vol. 398, April 1999). The research was by the Cliff Ecology Research Group (C.E.R.G.), University of Guelph, Ontario, Canada and led by Dr. Doug Larson. Their pioneering work had established that ancient stunted trees on cliffs were part of a '*previously undetected global pattern*' (my emphasis) and furthermore that these environments contained some of the '*slowest growing woody plants*' (my emphasis) on Earth. And the research had found yew to be a *feature* of such environments!

Here was sure and certain evidence for what at first seemed to be so impossible suddenly transforming a knowledgeable speculation into stark reality - and with staggering implications of responsibility necessitating a completely new approach to the age of Britain's botanical landscape and in particular its old yew population. As I later discovered, thanks to Doug generously sharing further details of C.E.R.G.'s research, the team discovered the almost impossibly slow growth rate of over *200 growth rings in a mere 3/4 in. (2 cm)* of radial growth from a dead *branch* of yew, collected at the limestone escarpment of Whitbarrow Scar in southern Cumbria. Microscopy revealed that the ring widths were so small that in some cases they were as tiny as the cells of the wood itself and thus almost imperceptibly different. To human eyes over any length of time this yew would in fact *not* be seen to grow at all, such is the miniscule average annual increment of mass it has produced year on year and *consistently for over two centuries*.

So it seems that to *minimise* growth is not a short term response to unusual conditions, but a completely effective long term survival strategy built into *every yew seed*. It means each is adeptly programmed to adapt its growth to suit *any* habitat within its environmental and climatic range and determinedly still achieve an 'immortal' life span. It is startling to think that the same yew seed which is capable of developing into a 'bonsai' tree on the side of a cliff, could also grow into a forest of yew by seeding in a place where it can grow and develop layered trunks around itself. Although the comparatively tiny yew merely look like very young bushes, if they are ancient they are just as mighty in their way and deserve as much recognition, respect and protection as their more obviously ancient cousins sometimes with a trunk girth up to five or six times their own, i.e. in excess of 30 ft (9.0 m approx) in circumference.

The C.E.R.G. research is the only major study so far to be completed in Britain specifically concerning small, stunted yew on cliffs and confirmed a tree at Markland Grips near Sheffield, South Yorkshire, England, to be over 1000 years by *continuous* ring count - yet with a diameter of only 60 cm (approx. 6ft or 188 cm *girth* !). Small, yet ancient, juniper were also found and thus it proved that some of Britain's *oldest trees* may well be on cliff, scarp and mountain environments as found in Cumbria and the Peak District (the team also examined yew at Llangollen in Wales) showing, as mentioned, that similar terrain *throughout* these islands could harbour the same. The study crucially stated that tree recruitment and growth in these locales were actually steady throughout their lifetime and not 'pulsed' i.e. seeing surges of growth because these environments have, in the main, mostly remained entirely *undisturbed* due to their comparative inaccessibility from the negative effects of man or animal upon tree habitats - such as wildwood clearance and sheep or deer browsing. So as such incredibly slow growth rates and tiny annual biomass increases of less than a gram per year have been proven to exist by C.E.R.G., then a 3000 year old estimate for the yew on Low Scawdel is certainly within the realms of possibility and therefore worthy of further investigation. In any event, that it is a notable yew with survival skills unsurpassed by any other tree in similar terrain, and probably ancient as a result, seems to be in little doubt.

However Doug Larson has always emphasised that his samples were taken from strictly cliff environments, and whilst there are yew on the sheer cliff sides of the Jaws of Borrowdale, none of these sites have been analysed as yet. The yew trees I have focussed upon at Low Scawdel and King's Howe are in steep areas of broken rock (called talus) and loose scree slopes pounded by large boulders falling from above and not upon sheer faces, but they are as close as possible within my current resource capabilities to replicating the precise environment of the C.E.R.G. research.

At this point I cannot say with certainty that small, *exceptionally* ancient yew (2000 years old or more) do indeed exist in Borrowdale. However, as bigger ancient yew of 1000 years of age at least certainly do (i.e. the grove of the Borrowdale Yews) I am also of the opinion based on the research conducted so far that exceptionally ancient yew *could* well be found in this valley, and elsewhere throughout the British Isles. I am confident, rather than hopeful, that this will be discovered by further dendrological investigation, proving that the *natural* ancient yew heritage, previously overlooked because of small size, will be shown to be of far greater age than we have ever imagined possible.

The only empirical data so far confirms that, on paper, a large proportion of the *natural* ancient yew heritage of Britain has indeed been overlooked. And amongst them *are* yew of a greater age and slower growth than previously assumed. Resources are clearly needed to establish whether this is a new found phenomenon involving not only ancient yew, but potentially exceptionally ancient yew or not - and the distribution and extent of these significant trees. Such research may well confirm that there are certainly many hundreds, perhaps thousands, of sites throughout wild, remote - and urban and suburban - Britain which contain such yew.

The phenomenon is not necessarily restricted to a few specialist environments as in Borrowdale or those in Doug Larson's study, as in 2001 small ancient looking yew were identified upon the 800ft high limestone crag of Cappel Carregg, Carmarthenshire, south Wales by Jan Fry, Allen Meredith and myself. Since then further research by yew enthusiast Philip Burbury based in Darlington, Co. Durham, England has revealed yew in small pockets of woodland and lone yews up to 17 ft (5.0m) girth living amongst the highest limestone plateaus and escarpments of North Yorkshire, where in some places the environment is scientifically classified as 'climatically sub marginal' i.e. it is more akin to Scandinavia, and consequently sub Arctic!

Yew have also been found noted dotted along the highest ground of the ancient Offa's Dyke on the English - Welsh border by Allen Meredith. As he observed, though they look small from a distance and are too inaccessible to record exact sizes, from as close as you can get they are clearly larger, ancient trees. Limestone and sandstone gorges, for example the valleys of the Rivers Irthing and Allen in Northumberland, have extant wild yew populations and the latter is recorded as being used as a source of longbows in the Medieval and Middle ages periods - and, therefore, who knows how long before that? Although British yew wood is usually inferior for military quality longbow making, the yew wood from northern England is known amongst bowyers to be the best in Britain precisely due to it being *extremely slow growing*. (This fact was personally confirmed in 2004 by military historian and world authority on the longbow, Robert Hardy).



Castle Eden Dene in Co. Durham, north east England, is a special site of rare flora and fauna protected by English Nature. It is described on pages 213-14 in *The Wild Woods - A Regional Guide to Britain's Ancient Woodland*, (P. Marren, David & Charles, 1992) :

"... the Dene is Magnesian limestone topped with boulder clay. Much of the woodland, especially steep hangers lining the ravine, is *ancient and natural and has probably never been wholly cleared. Some of it seems to be natural scrub of ash, hazel and yew. Above all the dene is a place of wild yews....yew groves of Castle Eden Dene are amongst the most extensive in the country.*" (my emphasis).

These yew groves are featured at the central 54 acres of the Dene as the very name 'Eden' derives from the Saxon *Yoden* meaning a 'valley of yew'. So when the Saxons named the place over 1000 years ago it was *already* a noticeable and renowned yew habitat. Given that parts have remained undisturbed since, there is no reason to dismiss out of hand that some of the trees originally witnessed by the Saxons - or earlier British tribes - may *still be there*. However, despite the care and attention given to the yew their number are not considered to contain exceptionally old individuals in the opinion of an ex-warden stated in 2000, simply because they are too small. However this opinion, in all fairness, was cited without awareness of C.E.R.G.'s groundbreaking research and therefore shed a new light of possibilities upon the age of some of the valley's yew, and showing a need for re-assessment of at least some of them by modern dendrological analysis.

Certainly it is fairly obvious that in some parts of the valley there are small sapling yew of 'young' age (up to 300 years) grown naturally from seed dispersal by birds and rodents in a largely unmanaged woodland. In the main publicly accessible areas, however, there are no apparent large yew, with the maximum girth of most visible trees being around 10 - 12 ft (2.75 - 3.67 m.) and most below this. So on a 'typical' basis there appears to be no evidence to reasonably consider that yew growing there are over a millennium old. But then the yew at Markland Grips, as mentioned above, is both 'small'...and ancient. And a significant factor at Castle Eden Dene which slows down yew growth may be that much of the yew population grows closely together creating competition for water and nutrients, but also in turn these groves are often shaded by taller deciduous trees for half the year at least in what is generally a very dense woodland.

Returning to the upland yew in Cumbria, forest fires in valleys adjacent to Borrowdale broke out in the spring of 2003 after a prolonged drought (ironically in one of the wettest places in England) and which ravaged areas of ancient woodland. I have to confess to a few heart stopping moments had these fires spread to Borrowdale where they might have potentially destroyed an ancient tree heritage of what appears to be of global botanical significance. Increasing drought year on year in north west Britain is also exacerbating this risk as there is obviously limited soil cover to protect yew roots in such rocky environments which are inevitably exposed more than, say, the root mass of yews in a garden, churchyard or parkland setting. Thus fire could penetrate further into the roots of an upland yew and considerably decrease its capability to survive such trauma.

The yews' isolation upon Grange Fell, King's Howe and Low Scawdel is in an area which, until the late 1980's and early 1990's, was only open to tourism on a seasonal basis from April to October. However in the 21st century the demands of tourism are now all year round, and within the vast majority of environmentally sensitive people visiting the area come the minority, who ignore all aspects of the Country Code and are a proven cause of forest fires. Hence I fear that we may lose some of the most ancient, and therefore most precious, natural woody inhabitants of Britain before we have understood even one of the most basic things about them - how old they *really* are. Their loss would thus be incalculable and in areas at risk from forest fires it is to be hoped that in the future the presence of these yews is prioritised as being essential by those with responsibility for protection of the area in the unfortunate event of a conflagration.

Forest fires are not the only threat, as farmland maintenance and upland forest scrub clearance is also another potential danger, and if a yew does not 'look big enough' to be ancient then it will almost certainly be grubbed up. Fortunately however there is increasing environmental respect and sensitivity amongst the upland farming industry especially, and with the conservation profile of ancient yew protection in Britain constantly being raised, yew are being saved in clearance operations which would have been lost not too long ago. A recent example was noted by AYG Contributory Member Cliff Hansford and involved a farmer in Kent clearing woodland, finding a yew of 17ft (5.0 m) girth high on the North Downs and thankfully notifying the authorities. After inspection this yew has been provisionally estimated by professional opinion to be 800 years old applying standard girth to age formulas and therefore is a really significant find. Thanks to the recent work of Cliff Hansford the wild yew population of the North Downs area and Kent in general is now receiving exceptional professional attention in view of its potential population of many more smaller than 'average' very old or ancient yew outside churchyards.

Based on the premise that in order to protect ancient yew means first establishing the extent of the population which truly exists in Britain, then this objective clearly cannot be achievable as things stand, because the extent of this small, yet ancient, yew population is unknown, having only come to light because of the investigations carried out by C.E.R.G. in 1999 and 2001. That there is an urgent need for funding, resources and pan-organisational cooperation between mutually interested enthusiasts and professionals is absolutely clear.



Fig.8 Lone yew on Grange Fell, Borrowdale. Is this an ancient tree?
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Over the last 15 years I have been building a corpus of work which inadvertently became targeted to obtain more recognition for yew habitats outside churchyards containing potentially ancient yew, because so much attention, and rightly so, is given to that better known and intrinsically essential aspect of yew in Britain's cultural and spiritual heritage. However, it has become almost a truism, and often quoted in the press (e.g. The Hunt for Britain's Ancient Trees, Telegraph Weekend, 23rd Dec., 2003) that ancient yew in churchyards are 'only' found in England and Wales, and this has further led to the understandable assumption in many a mind that ancient yew are indeed *only* found in churchyards. And that they have to be 'large'. This latest pioneering empirical tree science shows that this is not the case at all. Certainly churchyards contain most of Britain's *largest* ancient yew trees - but it would appear that they do not contain *all* of Britain's *ancient* yews.

The potential extent of ancient yew heritage in Britain therefore involves looking at a much larger scope of yew habitat than realised until, literally, the dawn of the 21st century. Also the size of trees in these habitats apparently suggests that there is *no minimum* girth size requirement for achieving venerable ages. Whatever the environment the yew will have as much of an 'eternal' life as it can, for Nature has equipped it admirably to do so, in ways both known and unknown to science. The longer it survives it seems the better its adaptation and thus growth rate will be; even if that growth can only be detected by modern microscopy. Moreover, it also means - and most importantly of all, that if left alone as much as possible, the yew of these environments will in all probability still be 'looking down from Heaven' in the *next* millenium.

Throughout Britain many private landowners such as the Ministry of Defence control vast areas, for example in Yorkshire, which contain limestone escarpments, cliffs and small river gorges all dotted with yew which could well be ancient - perhaps even exceptionally ancient trees. So long as such landowners are *unaware* of the *potential* of these yew then it is not fair to expect them to protect something they do not know could be of global botanical significance. Whilst many essential conservation schemes are thankfully operative in such regions taking into account the rare flora and fauna which have been identified as existing there, little consideration has been given to the stunted yews because until recently there has been no data to show how significant these specimens might be.

Hence re-appraisal of these areas taking the yew potential into account is now essential. Significant sites, such as Sites of Special Scientific Interest (S.S.S.I.'s) would become even more important with the proven presence of ancient yew. It is certainly so that some of these environments must have been continuously occupied by yew for over 1000 years at least (e.g. the clue in the name of Castle Eden dene) and that the yew have therefore played some essential function in their long term development making them what we see today for the other rare (or common) species around them. The yew are therefore rightful occupants of these environments with a surely deserved priority when it comes to the conservation and eco-sensitive management of such areas.



Fig.9 Another dense yew grove in Borrowdale showing the close proximity of trunks.
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However, while it is exciting to consider the possibility of the discovery of hundreds, if not thousands, more ancient yew, I would like to comment that even if the discovery (or re-recognition) of 10,000 ancient yew trees from John o' Groats to Land's End occurs in the future, this is but a *tiny fragment* of the population which naturally existed in Britain...once upon a time. What is living on the cliffs, ravines and mountains of Britain may be the *last* of the most *consistently* ancient natural tree habitats there are left in these islands. And this is indeed a fairy tale of sorts, a 'waking up after a long sleep' to an unexpected discovery of such priceless and incomparably unique natural treasures of yew still existing after so much devastation and ignorant treatment of the landscape.

No matter how many yew there may be, it is worth emphasising that they are a fraction - and thus *rare* - of what they could perhaps have been with better environmental management by humans, especially in the last few centuries. Quite literally the various 'upland' habitats have provided refuge for yew in the sense of 'taking to the hills' in the event of danger. But the yew never took to the hills, for they were there already. And they have witnessed from their fastnesses what has happened to their kind in the lower realms; how that yew population (ironically many planted by humans with sacred purposes in mind and perhaps originally sourced from wild, remote or upland trees at places of inherently tangible natural sanctity) has also 'retreated' to individual sanctuaries like churchyards, where the hand of Man can be somewhat controlled. So far the upland yew have remained secure to some extent in that so long as they remained beyond the reach of Man especially, then there would always be at least some ancient yew in Britain.

Now that human science has revealed their previously undetected presence and with the greater environmental awareness of society today, surely here is a cause for celebration in that Britain certainly has more ancient yew than was thought at the turn of the millennium. How many there are is a test of how British society values them; in that how much regard in the immediate future will be given to establishing, as an environmentally, historically and botanically significant priority, the extent of the population in distribution and number. Until this is known it cannot be *fully* protected. Any success without first establishing the true scale of upland yew can therefore only ever be partial, when it *could* be virtually complete, and would be a virtually unparalleled environmental achievement one day; of which Britain could be proud, and recognised on a global basis.

If the yew was a species of unique bird and the processes involving its growth, self regeneration and species reproduction were as yet poorly understood, and a population of millions had dwindled to less than 10,000, then it is clear how this would be seen as a crisis. Finding where those remaining birds were in their natural habitat and assessing the risks to them and then protecting them would be a matter of course. The ancient yew fulfils all the criteria of it being, in comparison to its former days, a rare (and becoming rarer as things stand) indigenous British tree in ancient form. Can the yew therefore not be seen in the same light as a rare warm blooded creature?

Hopefully it will be possible to paraphrase a very well known song in the near future by increasing confirmation that:

¹The hills are alive - with ancient yew trees¹.

Additional references:

***Church of St.Cuthbert, Beltingham* - Rev. C.W. Herring, M.A. privately published pamphlet available from the church. No publication details.**

Cliff Ecology - Pattern and Process in Cliff Ecosystems - D. Larson, U. Matthes and D. Kelly, Cambridge University Press, 2001.

Contemporary Climatology - A. Henderson-Sellers and Peter J. Robinson, Longman, 1985.

Mines of the Lake District Fells - John Adams, Dalesman, 1995.

The Observer's Book of Trees - K. Edlin, Bloomsbury, 1971.

C. MacCarty (ex - Warden, Castle Eden dene) - personal correspondence.

Grateful thanks :

Ancient Yew Group - Tim Hills, Fred Hageneder and Cliff Hansford.

Cliff Ecology Research Group - Doug Larson and the team.

Conservation Foundation - David Bellamy, David Shreeve and Libby Symon.

Eibenfruede

Friends of the Trees - Fred Hageneder.

Robert Hardy.

Tree Register of Great Britain - David Alderman.

Tree Ring Services UK - Andy Moir.

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