

The Charles Ackers Redwood Grove and the Naylor Pinetum



"In the interest of arboriculture our oldest and finest trees should be left for succeeding generations."

"In the interests of forestry we should preserve our famous stands of trees."

"My reason for offering this gift to the Society... that such a unique grove should be in the hands of a continuous society or organisation, in the same way as historical buildings and famous viewpoints have been made over to the National Trust. I say 'unique' because I think that there is no other planted grove of redwoods as old or as fine as this one at Leighton anywhere in the world."

These extracts are from a letter dated April 29th 1957 from C.P.Ackers to the Editor of the Quarterly Journal of Forestry, outlining his reasons for donating the famous Redwood Grove at Leighton and the surrounding woodland to the RFS. More than 50 years later the concepts he expressed are still very much alive.

The Royal Forestry Society's Leighton Redwood Grove was originally part of the Leighton Estate, an innovative rural enterprise created by John Naylor between 1840 and 1889. In that time he used a wide range of plants and animals, many new to Britain, and recent industrial techniques to make Leighton one of the foremost estates of those times. What we now call the Old Grove was planted by John Naylor in 1857, a mere dozen years after the introduction of the Coast Redwoods (*Sequoia sempervirens*) to Britain.

The estate was subsequently purchased in 1931 by Charles Ackers who had developed woodlands and associated businesses mainly in Gloucestershire. He was impressed by the redwoods, then 74 years old, and soon planted more. These included 6.5ha in 1934 which, together with the Old Grove, some mixed woodland and an open area, made up the 10ha which Charles Ackers most generously gave to the Society in 1958.

The original redwoods of the Old Grove, now more than 150 years old and amongst the oldest outside the natural range in California, still stand. Some exceed 40m in height and 20 cubic metres in volume, representing a volume

of almost 3000 cubic metres per hectare. They remain unthinned under the terms of Charles Ackers' gift. Their natural lifespan can be up to 2200 years and averages 300 to 700 years, so our oldest redwoods are still young by comparison. So far they have fared well in conditions which only partly resemble California. There the remnants of the once vast forests enjoy 1800mm rainfall, hot summers, little frost and, most importantly, summer coastal fogs. Here they suffer browning and shedding of foliage in response to high winds and lengthy dry spells but have always recovered without long-term ill-effects; hard frosts do not appear to harm them either. Lightning is not uncommon both here in Wales or in their native environment, and two of our old redwoods were struck in 1988 causing stem damage without the need for remedial work (pictured overleaf).

The redwoods planted by Charles Ackers in 1934, immediately adjacent to the Old Grove, are just as impressive in their own right. Roughly half the age, they have been thinned up to five times and now stand at over 1200 cubic metres per hectare with total thinnings in excess of 150cm per hectare. They are still growing vigorously, though a few have been lost



A scar in one of the old redwoods caused by lightning

to windthrow. A number of redwoods planted in 1863 were blown in 1936, and now strikingly illustrate the coppicing that is so rare in conifers, with some shoots nearly rivalling the surrounding trees of similar age. One of the trees blown retained part of its root system in situ and has since developed upright branches of tree form and size (below), while the shattered underside branches have rooted in five places.



This windblown tree resembles a row of five young redwoods

A Pinetum was started in 1961 and currently contains over 100 specimens. This area is managed to favour native wild-flowers. Other species include:

- An array of open-grown giant/Sierra redwoods (*Sequoiadendron giganteum*),
- a 1984 planting of Dawn redwood (*Metasequoia glyptostroboides*) in mixture with Norway spruce,
- Leyland Cypress (*Cupressocyparis Leylandii*); a hybrid tree with local connections in that it was first recorded in 1888 only a few fields away near Leighton Hall.

The chalet was constructed in 2000 as a Millennium project, designed and built by brothers Henry and John Russell of Bristol. The frame and inner cladding are redwood thinnings from those planted in 1934, and the Ackers family link continues in the form of European larch external cladding, grown on the estate in Gloucestershire and donated by Mrs Torril Freeman, daughter of Charles Ackers. The design is based on a traditional timber frame, fully exposed to view on the inside.



The chalet is used for group tours and meetings, and is a beautiful example of traditional timber construction

The woods are managed by the RFS, however the warden David Williams provides an invaluable contribution. He has volunteered his services for over 30 years and passed on his knowledge to hundreds of people during his guided tours of the wood.



Although the site is so different to the other two woodlands owned by the RFS there are still similarities in both the objectives and the challenges the woods face. Management is limited, with maintenance of the Old Grove a priority. Other areas are thinned to ensure the trees grow as healthily as possible to create good quality timber, and allow light to reach the surface to encourage a varied ground flora. Conservation and education are inherent within all management at Leighton, with tours and meets hosted by the warden David Williams and local RFS divisions. The desire for diversity is evidenced by the Pinetum, and also in the management of the open spaces which are mown at varied lengths to encourage meadow flowers and also provide an environment conducive to butterflies and other insects.

Funding for the management and upkeep of the Leighton redwoods and Naylor Pinetum comes from the RFS and generous donations from private individuals and foundations. Some income is also received from thinnings, although

commercial timber production certainly is not the primary objective of the wood.

As with all woodlands there are several challenges posed by humans, the climate, pests and diseases and also finances. The chalet has been vandalised by youths, however this has now been fully restored. As the woods aren't highly visited without a guide present, and are in a remote location, litter and other visitor-related issues aren't particularly significant. Climate change is set to create several new challenges to forestry, with the redwoods potentially threatened by the increased weather extremes, such as prolonged droughts or deeper frosts. In the UK redwoods generally offer an alternative option to the mainstream conifer species such as Corsican pine which are severely threatened by diseases. However a changing climate may also provide conditions more suitable to pests and diseases, with *Phytophthora ramorum* (the sudden oak death pathogen) increasingly linked to the decline and death of redwoods in California. Management will strive to ensure this disease never becomes a serious threat to the redwoods at Leighton if it ever arrives in the UK.

These unique and spectacular woods stand as a testament to the impressive work and management of John Naylor, Charles Ackers and the RFS. The Society aims to ensure these woods remain an excellent historical, educational and recreational site for this and future generations to enjoy.



The area in the foreground is carefully managed to ensure it is suitable for wildflowers. The trees on the right show the northernmost boundary of the Upper Naylor Pinetum

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