

Case Study

From PAWS to floors

**Producing high quality
wood products from ancient
woodland restoration
in North Wales**

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**WOODLAND
TRUST**

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In the absence of grant aid to support ancient woodland restoration in Wales, woodland owners are obliged to look for more creative ways to make restoration work pay. At Coed y Galchog in North Wales, the owners are planning to restore their beautiful Plantation on Ancient Woodland Site (PAWS) by gradually removing planted Douglas fir trees.

The good quality timber they remove will not go to waste. It will be turned into high quality floorboards to be used in the family's on-going renovation of a nearby factory unit. The owners will be able to continue with the restoration of their cherished woodland, and save themselves money in the process.

An investment for the future

Ray and Jeannie Turner have owned the 11-hectare wood, Coed y Galchog, for ten years. They bought it with their family in mind – it was important that their 14 grandchildren, all regular visitors, would grow up with an appreciation of the opportunities owning a woodland could bring.

‘‘When the wood was purchased our motto was to “protect, restore and preserve for future generations” and this has been our main driver.’’

Ray Turner

Coed y Galchog was originally native deciduous woodland, but after World War II the native trees were felled and replaced by planted conifers. Fortunately, like so many PAWS woodlands, Coed y Galchog retained many of its ancient woodland features. This meant that returning the wood back to something more like its ancient woodland past was a possibility, and something Ray and Jeannie were keen to explore.

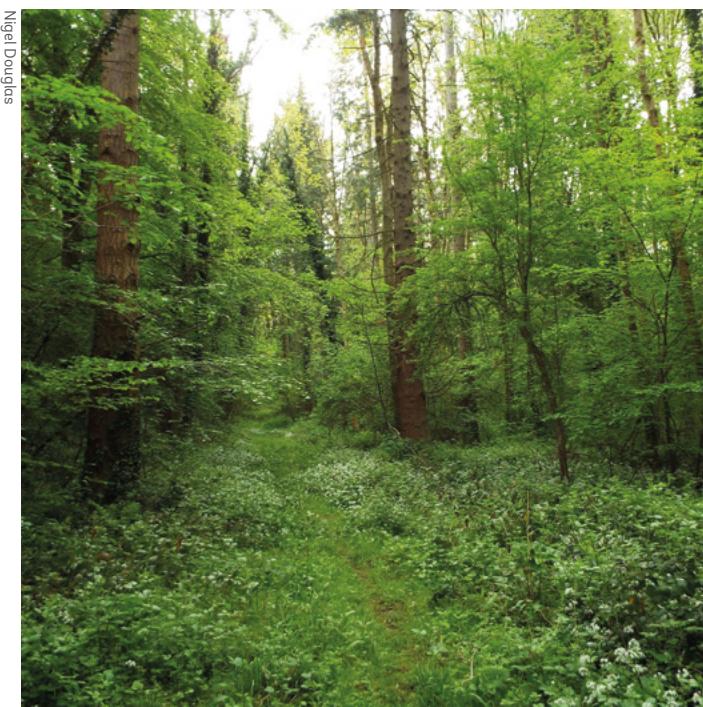
More than just a woodland

The family's original plan for their woodland was drastically changed when one of their grandchildren was diagnosed with leukaemia. Since then the woodland has played an important role in the lives of their grandson, family and friends by providing countless fun activities and camping events. Children's cancer specialists and teams have also participated in events, camps and team building events in the forest.

The family's vision is to eventually be able to provide access to the woodland for other children recovering from leukaemia and cancer so that they can enjoy and benefit from its beauty. Ray's focus now is to provide better education and training for those who provide treatment for those children.

Unearthing clues to the past

The Woodland Trust's ancient woodland restoration project officer, Nigel Douglas, was able to offer Ray and Jeannie support for their vision in a number of ways. An ancient woodland restoration survey was carried out for the woodland, focussing on finding and recording the many remnants of the wood's historic past. This included mature native trees around the fringes of the woodland, and an impressive array of ancient woodland plants including bluebell (*Hyacinthoides nonscripta*), wood sorrel (*Oxalis acetosella*), yellow archangel (*Lamiastrum galeobdolon*),



Remnants of its ancient woodland past still survive in Coed y Galchog amongst the plantation trees

yellow pimpernel (*Lysimachia nemorum*) and the rare bird's-nest orchid (*Neottia nidus-avis*). A restoration plan was then drawn up to help prioritise management work over the coming years which would safeguard and nurture these important features.

Mike Hughes, with Ancient Woodland Restoration project partners Coed Cymru, also offered his support, drawing up a felling licence application to allow thinning work to go ahead to gradually remove the planted Douglas fir from the woodland.

Letting in the light

Restoring ancient woodland and harvesting good quality timber are not mutually exclusive exercises – in fact the two are entirely compatible. Mature Douglas fir trees will be thinned from the woodland each year for the next five years, providing a steady supply of timber for Ray and Jeannie's renovation project while being careful not to stress the remaining habitat with a sudden removal of tree cover.

This thinning work will allow more light to get through to surviving native trees like oak, ash, elm and hazel, encouraging them to regenerate. Increased light levels will also reach the woodland floor, allowing woodland specialist flowers such as wood anemone and wood sorrel to flourish. Gradually the structure of the woodland will change to a more natural form, dominated by native tree species.

Key Facts

- Coed y Galchog is part of the larger Castle Wood, south of Ruthin.
- Coed y Galchog is made up of 7.6 hectares of Plantation on Ancient Woodland (PAWS), 2.5 hectares of Restored Ancient Woodland (RAWS) and 1.3 hectares of Ancient Semi-Natural Woodland (ASNW).
- The owners plan to thin around 120m³ of Douglas fir each year for five years.
- This will contribute towards the 17,500 square feet of timber flooring needed by the owners to renovate a nearby factory unit, saving the family money.



Coed Cymru's Mike Hughes surveys Coed y Galchog with owner Ray

Making trees work for you

Bringing damaged ancient woodland back into restoration requires careful management. Thanks to funding from the Heritage Lottery Fund, the Woodland Trust is offering landowners and managers professional support and training to sustainably manage and restore their woodlands.

If you own a plantation on ancient woodland site, we can help you discover its history and provide independent and practical advice on topics including:

- How restoration can complement your woodland business and interests
- How restoration can support forestry certification
- Woodland management planning and applying for felling licences

Contact the Woodland Trust's Ancient Woodland Restoration Team at restoration@woodlandtrust.org.uk and find out how we can help make trees work for you.

Astudiaeth Achos

Troi Planhigfa ar Safle Coetir Hynafol yn lloriau

**Yn cynhyrchu cynhyrchion coed o ansawdd
uchel trwy adfer coetir hynafol yng Ngogledd
Cymru**

Yn niffig cymorth grant i gefnogi adfer coetir hynafol yng Nghymru, mae perchnogion coetir yn gorfol chwilio am ffyrdd mwy creadigol o wneud i waith adfer dalu. Yng Nghoed y Galchog yng Ngogledd Cymru, mae'r perchnogion yn cynllunio i adfer eu Planhigfa ar Safle Coetir Hynafol (PAWS) hardd trwy gael gwared yn raddol â choed ffynidwyd Douglas a blannwyd.

Ni fydd y coed da ei ansawdd y byddant yn ei symud ymaith o'r goedwig yn mynd yn wastraff. Bydd yn cael ei droi'n estyllod o ansawdd uchel i'w defnyddio yn y gwaith sy'n mynd ymlaen gan y teulu i adfer uned ffatri gyfagos. Bydd y perchnogion yn gallu parhau i adfer eu coetir hoff, ac yn arbed arian i nhw eu hunain wrth wneud hynny.

Buddsoddiad at y dyfodol

Mae Ray a Jeannie Turner wedi bod yn berchen ar y goedwig 11 hectar, Coed y Galchog, am ddeng mlynedd. Fe wnaethant ei phrynu gyda'u teulu mewn cof - roedd hi'n bwysig i'w 14 o wyrion ac wyresau, i gyd yn ymwelwyr rheolaidd, dyfu i fyny gyda gwerthfawrogiad o'r cyfleoedd a allai ddod yn sgil bod yn berchen ar goetir.

**“Pan brynwyd y
goedwig ein harwyddair
oedd “diogelu, adfer
a chadw ar gyfer
cenedlaethau'r dyfodol”
a dyma beth sydd wedi
ein gyrru fwyaf.” ”**

Ray Turner

Coetir colldail brodorol oedd Coed y Galchog yn wreiddiol, ond ar ôl yr Ail Ryfel Byd torrwyd y coed brodorol i lawr a phlannwyd coed conwydd yn eu lle. Yn ffodus, fel cymaint o goetiroedd PAWS, cadwodd Coed y Galchog lawer o'i nodweddion coetir hynafol. Roedd hyn yn golygu bod troi'r goedwig yn ôl yn rhywbeth mwy tebyg i'w gorffennol coetir hynafol yn bosiblwyd, ac yn rhywbeth yr oedd Ray a Jeannie yn awyddus i'w archwilio.

Mwy na dim ond coetir

Cafodd cynllun gwreiddiol y teulu ar gyfer eu coetir ei newid yn llwyr pan ganfuwyd bod lewcemia ar un o'u hwyrion. Ers hynny mae'r coetir wedi chwarae rhan bwysig ym mywydau eu hŵyr, y teulu a ffrindiau trwy ddarparu gweithgareddau hwyllog a digwyddiadau gwersylla di-rif. Mae arbenigwyr a thimau canser plant wedi cymryd rhan mewn digwyddiadau, gwersylloedd a digwyddiadau meithrin tîm yn y goedwig hefyd.

Gweledigaeth y teulu yn y pen draw ydy gallu darparu mynediad i'r coetir i blant eraill sy'n dod dros lewcemia a chanser fel eu bod hwythau'n gallu mwynhau ac elwa ar ei brydferthwch. Ffocws Ray yn awr ydy darparu gwell addysg a hyfforddiant i'r rheini sy'n darparu triniaeth ar gyfer y plant hynny.

Dod o hyd i gliwiau i'r gorffennol

Roedd swyddog prosiect adfer coetir hynafol Coed Cadw, Nigel Douglas, yn gallu cynnig cymorth i Ray a Jeannie gyda'u gweledigaeth mewn nifer o ffyrdd. Cafodd arolwg adfer coetir hynafol ei wneud ar gyfer y coetir, yn canolbwntio ar ddod o hyd i a chofnodi llu o weddillion gorffennol hanesyddol y goedwig. Roedd hyn yn cynnwys coed brodorol aeddfed o



Mae gweddillion ei orffennol coetir hynafol yn dal i oroesi yng Nghoed y Galchog ymhlieth coed y blanhigfa

amgylch cyrion y coetir, a chasgliad trawiadol o blanhigion coetir hynafol, yn cynnwys clychau'r gog (*Hyacinthoides nonscripta*), suran y coed (*Oxalis acetosella*), marddanadl melyn (*Lamiastrum galeobdolon*), gwlydd melyn Mair (*Lysimachia nemorum*) a'r tegeirian nyth aderyn (*Neottia nidus-avis*) prin. Yna lluniwyd cynllun adfer i helpu i flaenoriaethu gwaith rheoli dros y blynnyddoedd i ddod a fyddai'n diogelu ac yn meithrin y nodweddion pwysig hyn.

Fe wnaeth Mike Hughes, ynghyd â phartneriaid y prosiect Adfer Coetir Hynafol, Coed Cymru, gynnig ei gymorth hefyd, gan lunio cais am drwydded cwympo coed i ganiatáu i waith teneuo fynd yn ei flaen i gael gwared yn raddol ar y ffynnidwydd Douglas a blannwyd o'r coetir.

Gadael y goleuni i mewn

Nid ydy adfer coetir hynafol a chynaeafu coed o ansawdd da yn weithgareddau sy'n annibynnol ar ei gilydd – mewn gwirionedd mae'r ddau'n gwbl gydnaws. Bydd coed ffynnidwydd Douglas aeddfed yn cael eu teneuo o'r coetir bob blwyddyn am y pum mlynedd nesaf, gan ddarparu cyflenwad cyson o goed ar gyfer prosiect adnewyddu Ray a Jeannie wrth iddyn nhw fod yn ofalus i beidio â rhoi straen ar y cynefin sydd ar ôl trwy gael gwared â'r gorchudd coed yn sydyn.

Bydd y gwaith teneuo yma'n caniatáu i fwy o oleuni ddod trwodd i'r coed brodorol sy'n goroesi megis derw, ynn, llwyfenni a chyll, gan eu hannog i aildyfu. Bydd lefelau uwch o oleuni yn cyrraedd llawr y coetir hefyd, gan ganiatáu i flodau arbenigol coetir, megis blodau'r gwynt a suran y coed, ffynnu. Yn raddol bydd strwythur y coetir yn newid yn ffurf fwy naturiol, ble mae rhywogaethau coed brodorol drechaf.

Gradually the structure of the woodland will change to a more natural form, dominated by native tree species.



Mike Hughes o Goed Cymru yn bwrw golwg ar Goed y Galchog gyda'r perchnennog Ray

Gwneud i goed weithio i chi

Mae dod â choetir hynafol a ddifrodwyd yn ôl i'w adfer yn gofyn am reoli gofalus. Diolch i gyllid gan Gronfa Dreftadaeth y Loteri, mae Coed Cadw yn cynnig cymorth a hyfforddiant proffesiynol i dirfeddianwyr a rheolwyr i reoli ac adfer eu coetiroedd yn gynaliadwy.

Os ydych chi'n berchen ar blanhigfa ar safle coetir hynafol, gallwn ni eich helpu i ddarganfod ei hanes a chynnig cyngor annibynnol ac ymarferol ar bynciau sy'n cynnwys:

- Mae Coed y Galchog yn rhan o goedwig fwy, Coed y Castell, i'r de o Ruthun.
- Mae Coed y Galchog wedi'i ffurfio o 7.6 hectar o Blanhigfa ar Safle Coetir Hynafol (PAWS), 2.5 hectar o Goetir Hynafol wedi'i Adfer (RAWS) a 1.3 hectar o Goetir Hynafol Lled-Naturiol (ASNW).
- Mae'r perchnogion yn bwriadu teneuo tua 120m3 o ffynnidwydd Douglas bob blwyddyn am bum mlynedd.
- Bydd hyn yn cyfrannu tuag at y 17,500 troedfedd sgwâr o lawr pren sydd ei angen ar y perchnogion i adnewyddu uned ffatri gyfagos, gan arbed arian i'r teulu.

Ffeithiau Allweddol

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