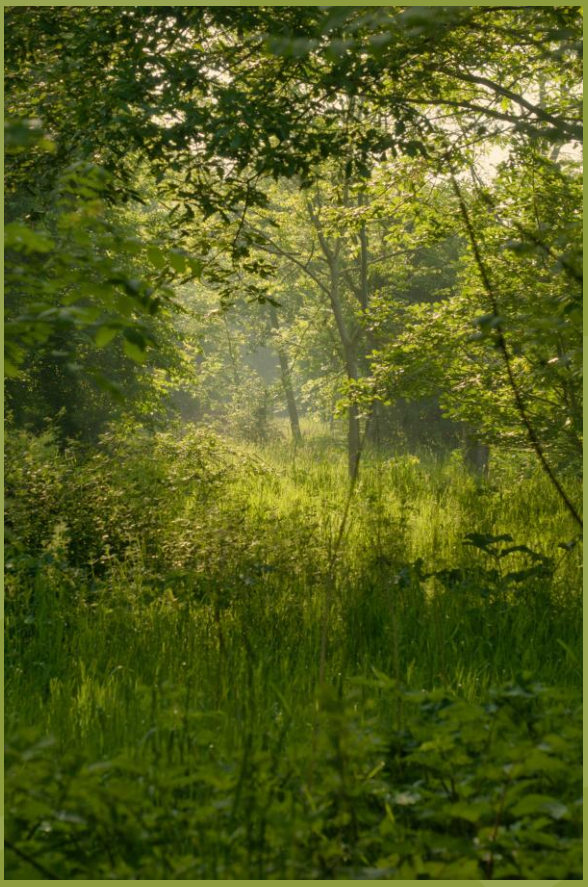
Research Report

2026

Wakelyns Tree Management Booklet

Christian Gossel and Paul Jackson



ORGANIC RESEARCH CENTRE

Introduction

Wakelyns Agroforestry in Suffolk is one of a few mature agroforestry sites across the UK. Initially planted in 1994 by Martin and Ann Wolfe, the site has since developed into a diverse landscape supporting multiple enterprises and a plethora of flora and fauna.
A key part of any agroforestry site is the trees themselves and their management. This is no different at Wakelyns, however, the journey has not been as smooth and directed as is encouraged nowadays but such are the risks of a pioneering site. Despite initial good intentions, little thought was given to the management of the planted trees in the short terms and even less so for the long-term, as is perhaps evidenced by the dense cover seen in Water and Far field at the site today.

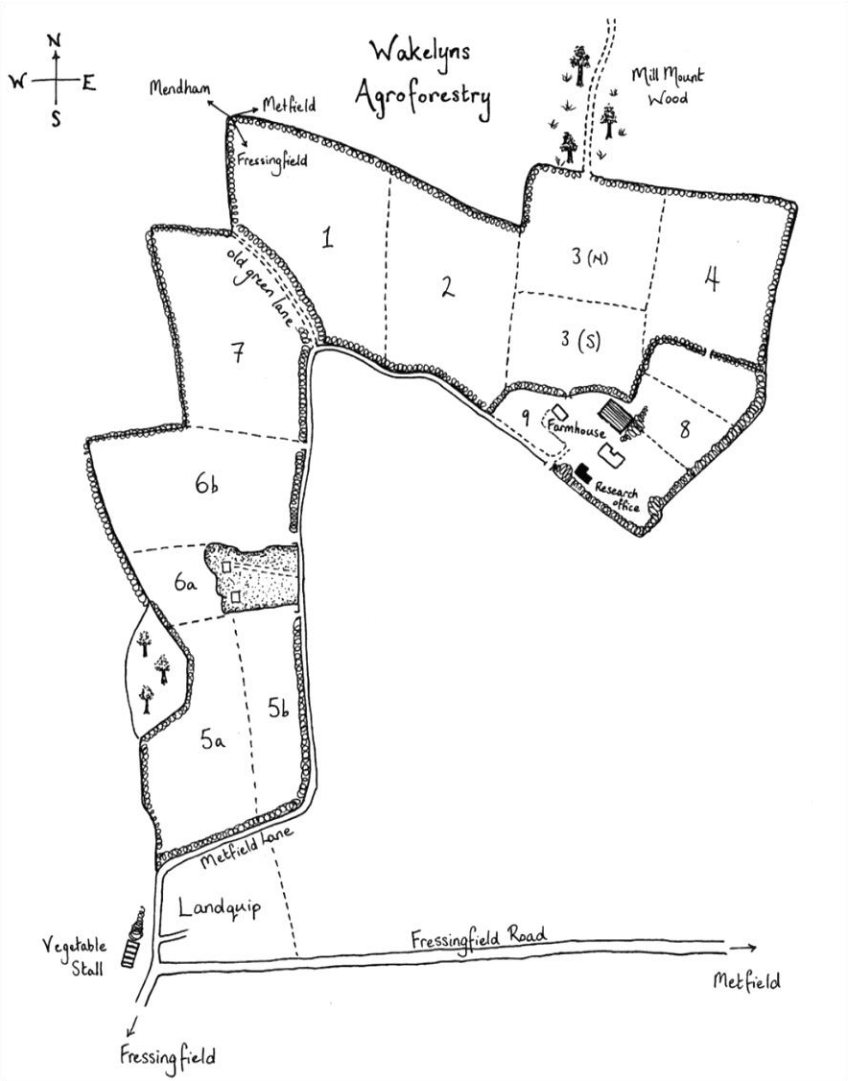
In the early 2000s a local arborist, Paul Jackson, took on management of the trees which led to a more structured approach. After years of service, Paul has started to wind down into a well-deserved retirement, however, with his departure also comes the loss of a wealth of knowledge. This booklet hopes to capture some of the expertise and lessons learned from Paul and the work at Wakelyns over the years. This resource can not only be used to inform future management and research on the trees at Wakelyns but also provides an insight for current agroforestry designers and practitioners as to how they can manage their system as it develops. Adapting to the unexpected changes and dynamic product markets is all part of the journey and despite 30+ years of growth, the future for trees at Wakelyns is still wide open.

The booklet focuses on trees in Far and Water field (see map on page 3) as these are the most mature and diverse, requiring multiple approaches for management. Each major species is covered with details on their management approach to date, potential products, and any potential future changes to management. Historical data records also provide some insights into tree performance over the years and individual examples are highlighted.

Contents

Introduction 1
Map of Wakelyns and Tree Index 3
Apple (*Malus domestica*) 6
Ash (*Fraxinus excelsior*) 7
Hornbeam (*Carpinus betulus*) 8
Italian Alder (*Alnus cordata*) 9
Oak (*Quercus petraea*) 10
Small-leaved Lime (*Tilia cordata*) 11
Sycamore (*Acer pseudoplatanus*) 12
Wild Cherry (*Prunus avium*) 13
Other Trees and General Comments 14

Map of Wakelyns and Tree Index



1. Far Field - 2+ ha - tree rows planted Feb ’94 to 310 trees of 7 timber species (Ash, Wild Cherry, Italian Alder, Small-leaved Lime, Sycamore, Oak, Hornbeam)

2. Water Field - 2+ ha - tree rows as Far Field plus 42 apple trees of 21 old varieties

3. Home Field - 2+ ha - tree rows partially planted, starting in 2001, to fruit and nut trees (plum, cherry, apple, pear, quince, apricot, peach, hazel), each of multiple varieties

4. Hazel Field - 2+ ha - tree rows planted Feb ’95 to 1200 hazel bushes, each individual genetically distinct; each row coppiced every 7-8 years

5. Willow Field - 4ha - tree rows planted Mar ’98 to a mixture of 5 fast-growing willow varieties; each row coppiced every 2 years

6. Vineyard (6a) and Mid Field (6b) - 3+ ha - No trees yet

7. North Field - 3+ ha - tree rows planted in Feb ’01 to 20 walnut trees and in Jan ’02 interspersed with varieties of plum; other walnuts and plums have been added occasionally since then, and one row is not yet planted

8. Old Paddock (sometimes used for compost-making)

9. Kitchen Garden

Total area: 22.5 hectares (57 acres)

Row Number	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Row Letter	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	O	C	O	A	S	C	C	I	O	A	S	O	H	O	L	S	I	C	H	A	L
2	H	H	S	L	A	L	S	S	H	A	H	H	I	S	H	O	P	S	P	O	A
3	C	A	H	H	C	I	O	A	L	H	C	L	C	I	O	L	C	O	A	S	O
4	S	I	I	I	H	S	H	S	A		I	C	L	C	P	A	H	A	O	O	L
5	L	O	O	O	L	A	I	L	I	O	L	P	P	H	L	C	C	H	C	P	I
6	A	S	C	C	I	O	A	O	C	L	A	A	S	A	O	L	I	L	I	A	P
7	I	L	S		O	L	L	C	L	C	L	S	I	P	H	I	O	S	P	H	S
8		A	H	L	H	H	C	H	A	S	O	I	S	I	S	H	A	O	A	C	C
9		L	A	I	O	S	H	I	S	I	H	S	P	O	P	O	P	C	H	I	H
10		I	L	O	I	O	O	A	I	S	S	P	L	L	A	P	S	I	L	L	A
11		C	S	S	C	C	S	H	H	L	I	C	H	S	C	A	L	P	S	O	H
12			C	H	L	I	O	A	O	H	C	H	C	H	I	S	A	O	I	I	P
13				A	S	A	C	S	O	A	L	O	A	C	H	H	P	S	H	S	I
14					A	I	H	O	S	O	C	I	O	I		L	H	C	L	H	L
15					H	A	L	I	L	C	I	A	H	C	I	O	I	L	C	C	S
16						L		C	C	I	H	L	L	A	C	S	L	I	P	P	C
17								L	I	O	S	O	P	S	P	A			S	A	O
18								S	H	A	A	A									
19								C			O										

A – Ash (*Fraxinus excelsior*)
C – Wild Cherry (*Prunus avium*)
H – Hornbeam (*Carpinus betulus*)
I – Italian Alder (*Alnus cordata*)
L – Small-leaved Lime (*Tilia cordata*)
O – Oak (*Quercus petraea*)
P – Apple (*Malus domestica*)
S – Sycamore (*Acer pseudoplatanus*)

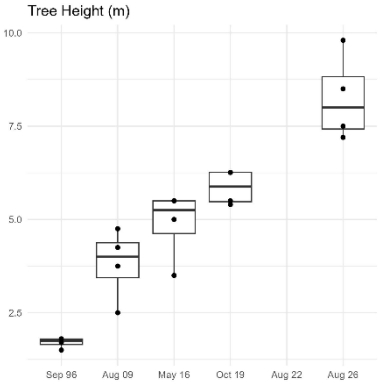
N

Far Field – Row B to Row L
Water Field – Row M to Row V

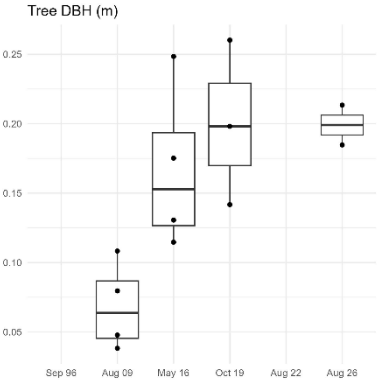
Apple (*Malus domestica*)

Apples have always been a key part of the design at Wakelyns. Unlike many of the trees, apples are primarily managed for their fruit as opposed to wood products. In Water field there are 23 different varieties to ensure seasonal, tase, and genetic diversity.

Typical management of apple involves annual pruning, however, this is done on a case-by-case basis at Wakelyns depending on the size and location of the branches rather than the universal pruning seen in commercial orchards.



The trees are grafted onto 106 rootstock, although many have grown to a height of roughly ~8m. Initially the tops of the trees were not pruned, forming a pleasant canopy layer. Around 2019, however, the tops leader were pruned back which resulted in extra vertical growth the following year. As such the trees are now look a little miss-shaped, however, this is not a priority and they are still very productive.



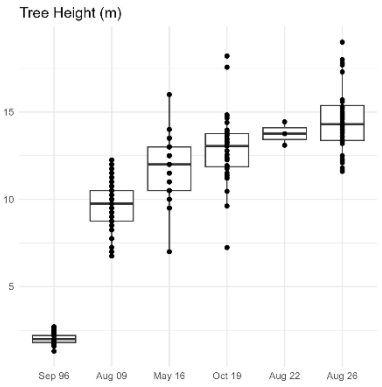
Future management should continue to focus on the fruits, pruning when necessary to ensure an open interior to reduce disease.

An interesting point to note is that the apple trees in Home field are managed in largely the same way as those in Water field, yet are noticeably smaller. This could be a topic for future research.

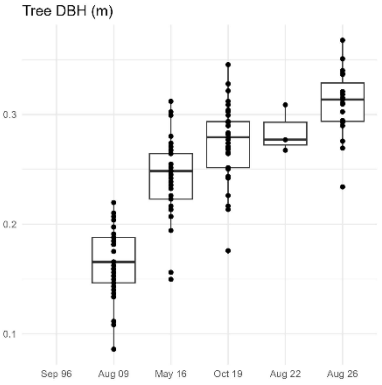
Ash (*Fraxinus excelsior*)

Ash trees have a significant presence at Wakelyns, although like elsewhere in the UK this has been curtailed by ash dieback. Most of the trees have been unaffected by ash dieback, possibly helped by the diversity of trees across the site, although there are notable cases of standing deadwood which is beneficial for wildlife.

Like with other trees, the ash were initially managed as standards and then began to be pollarded and coppiced. The majority, 37 out of 50, of these trees have been kept as standards with good timber potential. 10 trees have been pollarded or coppiced which has resulted in a mixed response. Some have produced strong shoots while others are slow to regrow and patchy. This is a curiosity given that ash has been historically pollarded across the UK.



Following the start of ash dieback in the UK the pollarding at Wakelyns was stopped. It has since been started again with a couple of examples which have responded well.



Going forward, those trees that are still of good quality should have their canopies raised to remove low hanging stems and encourage timber production. Those that have been pollarded should continue to be so with old pollards potentially restarted.

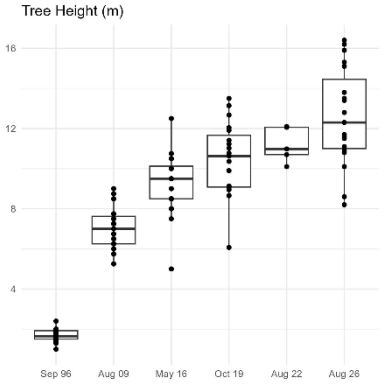
Hornbeam (*Carpinus betulus*)

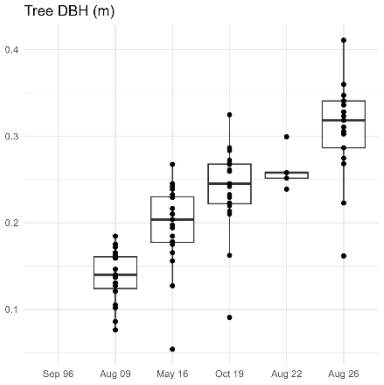
Hornbeams are an important species for productivity at Wakelyns. While the initial intention was planting for timber production, this has developed as the trees have grown. Initially, for every pair of standard trees, one has been reduced to a pollard.

Hornbeam, as a standard and a pollard, is long living. Maintaining the mixture of standard and pollard trees will not only provide a variety of products but also different habitats over several decades. Pollarding is currently on a rotation of ~5 years, ensuring enough woodchip is produced for the farmhouse boiler.

Overall the response of hornbeam to pollarding and coppicing has been very strong. It is well suited to this management type and as a result only one specimen has been lost. Furthermore, hornbeam tends to have limited timber value, making its role as a standard of limited appeal.

Due to the strong response and poor timber value, there may be an argument for pollarding all of the hornbeams.

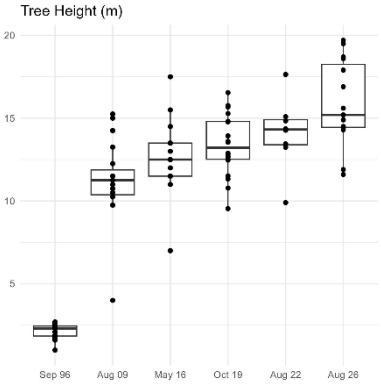




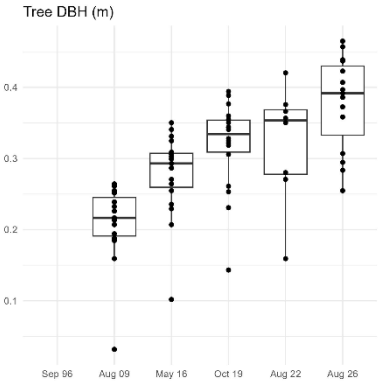
Italian Alder (*Alnus cordata*)

Italian alder is currently at a fork in the road in terms of management. Historically it has been viewed as a timber crop, however, the growth of the trees and lack of market demand has resulted in the timber aspect being less desirable. Some of the italian alders have already been pollarded, typically where there have been two standards with one of them being cut back.

Pollarding has seen mixed results, however, given the limited timber value and increasing amount of shading from the mature standards, future management may consider pollarding all of the trees and replacing those that don't survive. Those that have been pollarded and not survived tended to die during dry springs, so timing for the pollarding could be key.



This is quite a major change and will require a significant amount of work with 19 standards currently recorded in the fields. Further consideration also needs to be given to the potential benefits that standards currently provide in terms of micro-climate and biodiversity.



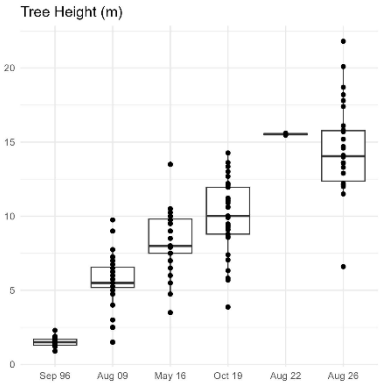
If existing standards are felled, then there may be some value in the wood as carving or wood turning material to recoup some of the costs.

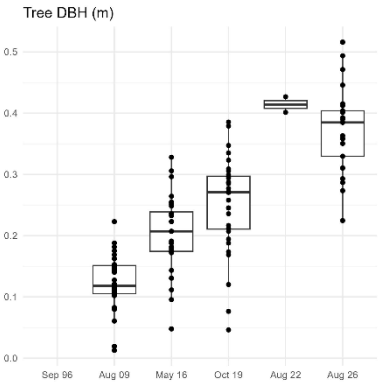
Oak (*Quercus petraea*)

Oaks are an iconic species across the UK, particularly as a large standard. They are offer a high biodiversity benefit, are long lived, and offer a sought after timber crop.

Of the 47 trees in water and far field, 33 have been kept as standards. Previous attempts have been made to pollard some oaks, however, this was not particularly successful and much of the regrowth was inconsistent and suffered from Oak Mildew.

Future management should focus on maintaining and supporting the standards with an eye to timber production, continuing the raise the canopy where appropriate. When it comes to harvesting for timber, a balance will have to be made between the value of the product and the value of the tree as is in the landscape. It may be deemed suitable to keep some mature trees for their biodiversity and micro-climate benefits in some of the rows, particularly at the Northern ends where shade is less of a concern.

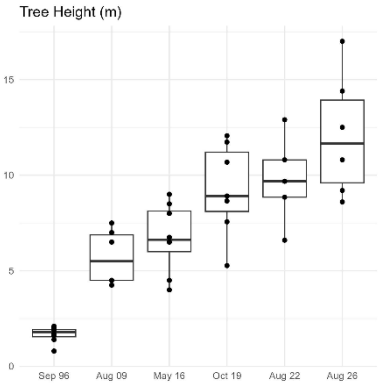


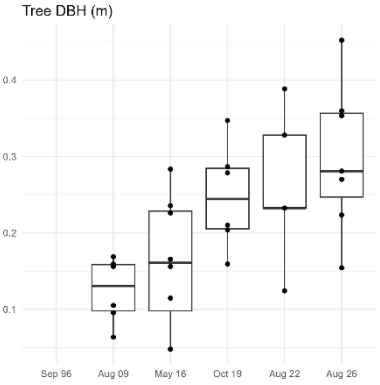


Small-leaved Lime (*Tilia cordata*)

Small-leaved lime has grown well at Wakelyns and was initially planted with timber production as standards in mind. After the first round of felling, many of the stumps regrew well as coppice, although perhaps a bit too well as the new stems were starting to interfere with the agricultural machinery in the cropping alleys.

Regular harvesting for woodchip helped, done every 3-6 years in which allows times for sufficient shoot growth but not into the cropping alley. A better solution was to pollard rather than coppice the trees which has now been done on just over half of the plantings. The majority of small-leaved lime trees are now coppiced or pollarded and harvested for woodchip.





Any remaining standards are unlikely to have value as timber, other than as carving/turning wood. It would be recommended to pollard all of the remaining small-leaved limes.

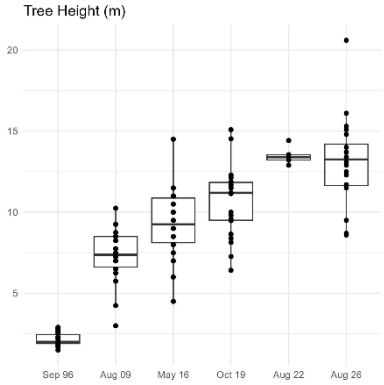
As well as woodchip for the wood boiler, there is evidence that small-leaved lime may also make suitable ramial woodchip, perhaps for use in the market garden or elsewhere on site.

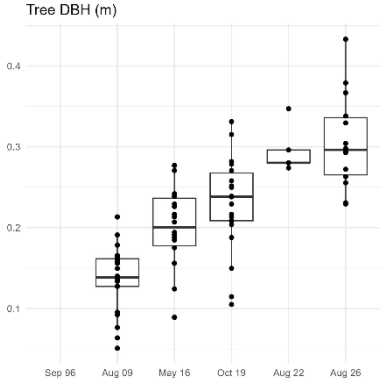
Sycamore (*Acer pseudoplatanus*)

Sycamores are a tree with two avenues of management at Wakelyns. While all initially planted as standards, just over half have been converted to pollards. As standards their timber potential is good and has been encouraged by lifting the canopy by removing lower branches. As pollards they have generally responded well to a rotation of 5 years.

There has been limited issues with seeding from trees, although this may be due to the regular turnover of soil within the cropping alleys.

A few trials have been conducted with sycamore, namely a lower level of pollarding to allow for easy access to cut the new shoots. This approach may also be suitable for other species that are pollarded, although perhaps less so with the more bushy species such as small-leaved lime.



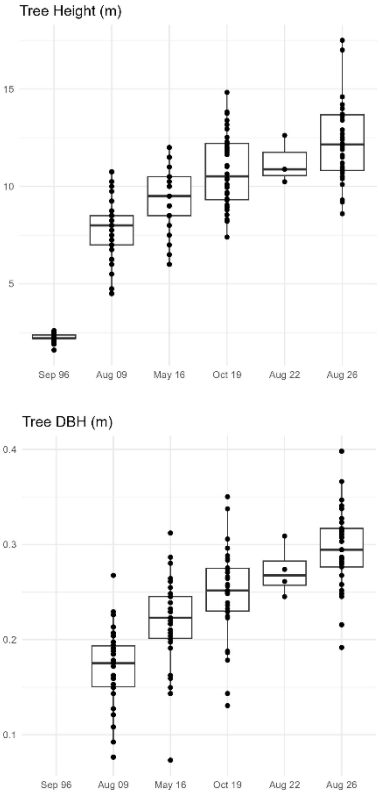


Wild Cherry (*Prunus avium*)

The cherries at Wakelyns were originally planted and managed as a timber species with lifted canopies, however, once they started to fruit they were found to be a fruiting-focused variety. Subsequently they have been managed for fruit rather than timber.

As such the last pollards were ~15 years ago. Any new pollarding would delay fruiting so would not be beneficial. Instead, allowing for fruiting until it is no longer sustainable then harvesting for timber may be the best route for management.

Cherries produce vigorous suckers, some of which have been pruned back over the years. Many, however, have been left for ~10 years to become additional trees as per a natural regeneration approach. It would be recommended to not allow too many suckers to establish as shade is already at a premium within the arable alleys.



Other Trees and General Comments

Walnut (*Juglans nigra*) and Ash-Leafed Maple (*Acer negundo*) have both been planted where existing trees were lost. Both species had ~6 trees planted which have grown well and both species are planned for timber production.

Brambles and blackthorn bushes have taken over some large areas between the trees. Historically these have been flailed by the farmers however this has lessened over the years. While beneficial for wildlife, the bushes are preventing natural regeneration of new trees and other undergrowth. Managing the bushes further would be a good priority in the future.

Longer term planning for trees in Water and Far field raises a few options. The first would be converting the alleys to permanent pasture, bringing in livestock. This is a typical transition for many silvoarable sites as the trees grow and start to limit crop production. This also raises questions over livestock access to the grass under and around the tree canopy. How will fencing work and which livestock would be most suitable to the site?

A second proposed plan is to remove every other row of trees. While requiring a substantial amount of work, it will open up the alleys to more light and potentially provide a fresh period of crop productivity. How this is done is also up for debate. Suggestions of hiring a biomass contractor to take all the material or buying a portable sawmill to process harvested standards on-site have been suggested.

Should either of these, or another path, be taken then time should also be taken to include a research aspect to monitor the productivity and biodiversity changes as a result of transforming a mature agroforestry system.

2026 Research Report
Wakelyns Tree Management Booklet

Organic Research Centre, Trent Lodge, Stroud Road, Cirencester, Gloucestershire. GL7 6JN

hello@organicresearchcentre.com | organicresearchcentre.com

Patrons: The Duchess of Richmond and Gordon, Christopher Bielenberg and Peter & Juliet Kindersley. The Progressive Farming Trust Ltd, trading as the Organic Research Centre, is a charity registered in England and Wales (281276). A company limited by guarantee (1513190). Registered office: Trent Lodge, Stroud Road, Cirencester GL7 6JN