

FALLEN FRUITS AND ORCHARD ROOTS: HISTORICAL ORCHARD RESEARCH IN THE QUANTOCK HILLS

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INTRODUCTION

Orchards are integral to the Somerset landscape. Trees in private and commercial orchards line up distinctively across the vales and levels, producing fruit to fuel the recent renaissance in cider making and drinking. In the western reaches of the county, the high heaths of the Quantock Hills rise up from the surrounding agricultural vales, and have been protected as an Area of Outstanding Natural Beauty (AONB) since 1956. They stand out, physically, and categorically, from the surrounding landscape, and are not traditionally included in definitions of Somerset's 'cider country'.

Yet after identifying several old and declining orchards within the farmland that encircles the hills, and lying within the AONB boundaries, AONB staff wondered whether the links between the surrounding orchard vales and the protected AONB landscape were deeper than most people thought. A joint initiative between Quantock Hills AONB Service and Bristol University's Department of Historical Studies, the 'Fallen Fruits' project set out to investigate orchard history in the Quantock parishes. Funding from three sources, allowed us (researchers Marianna Dudley [MD] and Nick Nourse [NN], working with project lead Peter Coates [PC]) to deploy a range of archival and digital materials to build up a detailed picture of just how prevalent orchards and associated apple activities were, historically, in the Quantocks area. This information about its rich orchard past situates the Quantock Hills firmly within the broader Somerset history of fruit cultivation and consumption, and provides a resource to inform future land use decisions in the Quantock Hills and surrounding areas.

This article details how we researched and mapped our findings in the two-part 'Fallen Fruits' project (2012-14), to create a set of maps that depict where orchards have been located since the early 19th century. The article also discusses the importance to us, as scholars funded mainly from the public purse, and to the AONB Service as a statutory body, of engagement with the local community in and around the Quantocks. For this has made the acquisition of knowledge about the

area's orchards a process of exchange whereby local stories, memories, expertise and innovation informed – and continue to inform – our fieldwork and historical research. This integrated approach also became central to the project's third and final part, 'At the Core of the Quantocks: Wider Dissemination of the Fruits of the Orchard Project', which culminated in a Quantock Apple Heritage Day.

PART I: MAPPING THE DECLINE OF QUANTOCK ORCHARDS, 1946-2007

The inspiration for 'Fallen Fruits: Mapping Orchard Decline in the Quantock Hills AONB' came from AONB Service Development Officer Iain Porter and Planning Officer Emma-Jane Preece, who had identified orchards as an aspect of the Quantocks landscape for which they sought more detailed historical information. New data would not only deepen and extend knowledge of historic land uses but also have the potential to inform current and future planning advice and stewardship guidance. PC, an environmental historian at the university who had working links with the AONB team, secured funding from the Arts and Humanities Research Council (AHRC) for Part One.¹ This initial phase of research was conducted in the summer of 2012 by MD, an early-career environmental historian at Bristol with research interests in the British landscape.

A treasure trove of source materials, including tithe data, was identified at the Somerset Heritage Centre, located on the outskirts of Taunton. The AONB Service also had on-site access to digitised Ordnance Survey maps and aerial photographic surveys from 1946 and 2007, as well as in-house MapInfo software, an established industry Geographical Information System (GIS) tool. It was evident that, in order to fully explore the extent of orchards in the Quantock Hills through a historical lens, the availability of map-based evidence was crucial. Aerial photographic surveys of existing traditional orchards by Natural England and the People's Trust for Endangered Species

(PTES) provided some methodological precedent.² The national scale of this survey, which located 35,787 traditional orchards across 51 counties (1% of which were then 'ground-truthed' by over 600 volunteers), and its purpose to create an inventory of Britain's existing traditional orchards to replace out-of-date information, clearly differed from our own. However, Natural England's endorsement of the 'unique perspective' that aerial photography provides for identifying orchards confirmed that the resource of historic aerial photographs at our disposal was an appropriate, and valuable, tool.

Furthermore, the MapInfo GIS system presented a method of not only comparing and contrasting recent and historical maps and visual records of orchards with modern OS (and other) maps, but also a way of constructing new map layers that depicted the various stages of orchard decline over a period that reaches from the 1830s to the present day.³

Part One of 'Fallen Fruits' used aerial photographic surveys from 1946 and 2007, Ordnance Survey maps and MapInfo GIS software, to create a series of map 'layers' that depict nine stages of orchard decline from 1946 to 2007.

The AONB was, from the outset, an obvious and distinctly demarcated study area. To explore the links in traditional orchard landscapes between the protected AONB and the surrounding Somerset landscape, however, we decided to include not just the sections of parishes that fell within the AONB, but entire parishes (within reason). For instance, North Petherton is a large parish that extends beyond the M5 motorway southeast of the Quantock Hills and we worked with the area up to the M5, but not beyond. This approach set out a comfortable border of land around the AONB without incorporating more distant areas of that particular parish that are on the edge of another distinctive Somerset landscape, the Levels, and physically remote from the Quantocks.

Having established the physical boundaries of the study area, a process of systematic cross-comparison between maps and aerial photographs ensued, whereby MD created a new digital map layer and associated database of nine stages of orchard coverage in 192 current and former orchard sites in the target landscape. Against base Ordnance Survey maps of 1:25,000 and 1:50,000 (which mark some orchard sites, of which few in fact correspond to current orchards), the black and white 1946 aerial photographs (taken by the RAF and with some militarily-sensitive areas blacked out) and colour 2007 aerial photographs (complete)

revealed various stage of orchard decline across the period that were identified visually and mapped using different colours. When laid over OS maps or aerial photographs of the target area, the map layer clearly illustrates whether there was an orchard at a particular site, when it was known to have existed, and over what period it declined (or remained).

As the Orchard Layer Key (Appendix, section 1) indicates, different stages of orchard decline are depicted by a range of bright colours, making it easy to identify the different sites and appreciate the extent of orchards that have disappeared or declined between 1946 and 2007. Unfortunately, that differentiation is lost in the monochrome reproduction of images in this journal. However, we have included a detail of the Kingston St Mary map (Fig. 1D), together with a copy of the relevant tithe map (Fig. 1A), 1946 aerial photograph (Fig. 1B) and 2007 aerial photograph with the sole extant orchard highlighted (Fig. 1C). These maps and aerial photographs illustrate the extent of orchard coverage and decline in one village. The range of orchard states – traditional, remnant (Fig. 2), and newly planted – cannot be appreciated. However, the number of orchard sites, as they have existed in varying forms, can be clearly seen.

Part One also provided the opportunity, in a case study of Bicknoller parish, to test the possibilities for using tithe maps and apportionment data from the early 19th century. Somerset Heritage Centre had embarked on a process of digitising its archive of tithe maps, which we had hoped to include in 'Fallen Fruits'. The digitisation process was complete, but geo-referencing the maps – the process of matching the hand-drawn 19th-century tithe map dimensions to real-world coordinates used today, to create digital maps that correspond exactly to OS, and other, maps – was not initially attempted, primarily because of the high cost involved. As a result, instead of being able to use digitised tithe maps that could be overlaid and compared directly with the other materials we were employing, the much more time-consuming task of entering the tithe map information on new map layers had to be pursued. The Bicknoller case study identified this as a time constraint, but it also demonstrated at a single parish level that information extracted from the tithe maps and apportionments could extend our understanding of orchard decline across the whole study area by over a century. Additional funding secured by PC meant that NN could build on this pilot study in Part Two by examining the tithe records for the whole of the research area.

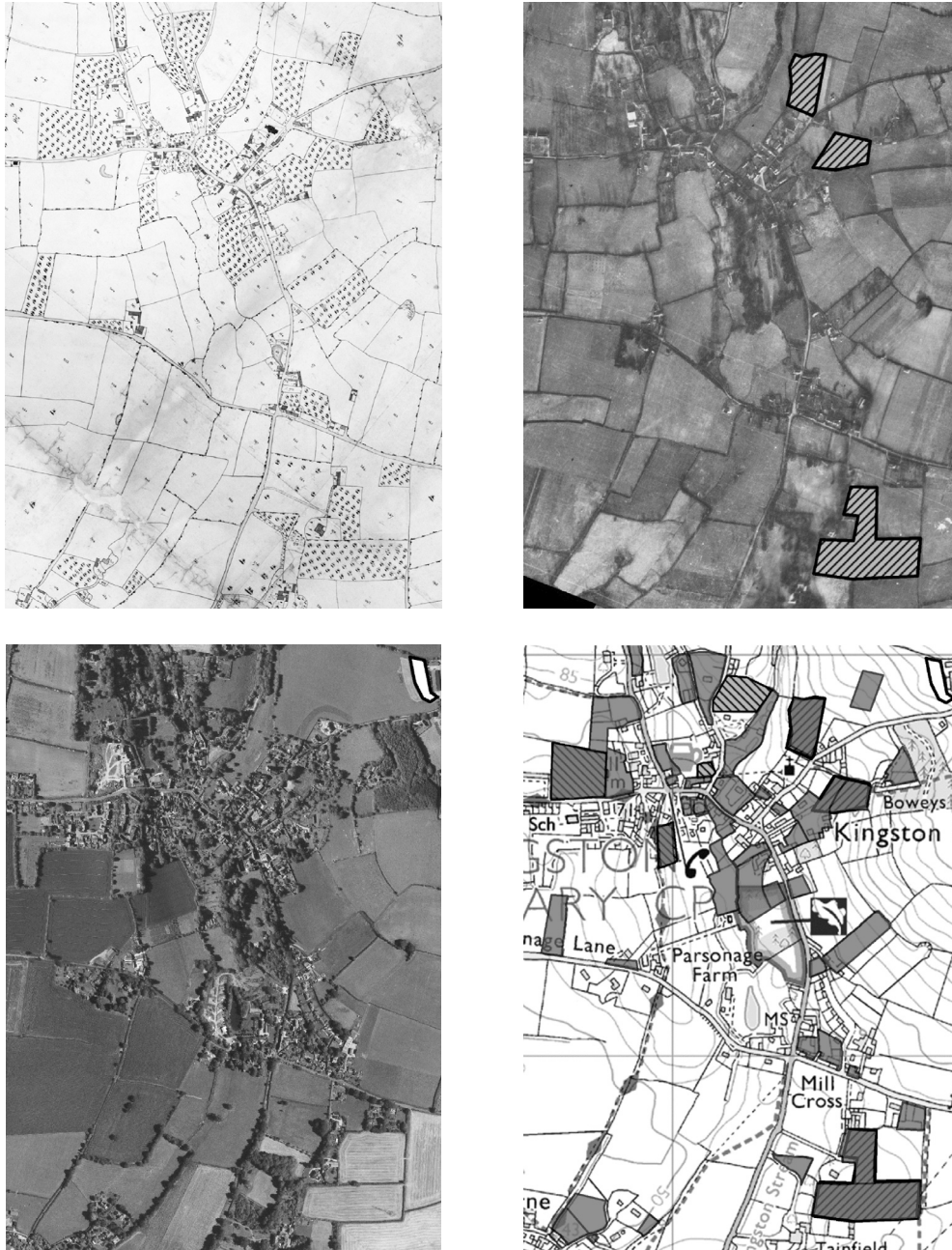


Fig. 1A (top left) Kingston St Mary tithe map, 1838, with orchards illustrated. 1B (top right) Kingston St Mary 1946 aerial photograph, with existing orchards marked. Over the period, significant orchard decline has occurred. 1C (bottom left) Kingston St Mary, 2007 aerial photograph. Orchards have further declined, and just one orchard is marked (in top right of photo); it occupies a new orchard site (not used for fruit growing in 1838 or 1946) in the village. 1D (bottom right) Kingston St Mary, OS, with all the orchard layers mapped. © Contains Ordnance Survey data. Crown Copyright/database right 2014



*Fig. 2 An old apple tree, clinging on for life – and still bearing fruit – in one of the remnant orchards we identified in Quantock parishes. Without care and maintenance, the weight of un-pruned branches and livestock rubbing against the trunks will topple old trees.
Photo: M. Dudley*

PART 2: MAPPING THE DECLINE OF QUANTOCK ORCHARDS, 1830s–1946

Part Two (winter 2012–13) was funded by the Quantock Hills AONB Service's Sustainable Development Fund (75%) and a supplementary grant from the University of Bristol, School of Biological Sciences' Lady Emily Smyth Agricultural Research Station (LESARS) Fund (25%) and employed another Bristol-based early-career researcher, NN, a social historian with extensive experience in land surveying and cartography. Part Two of 'Fallen Fruits' took as its primary sources the 19th-century tithe maps of the Quantocks. The maps and their associated apportionments – the legal document that detailed ownership and the monetary value of the land – are the official and surviving products of the Tithe Commutation Act of 1836 (6 & 7 Will 4 c 71, revised 1837). The new Act was passed on 13th August 1836 and replaced a 900-year tradition of funding the established Church by the levying of tithes. Previously, tithes were usually paid in kind, but the new Act brought in a money payment based on a seven-year average price of wheat, barley and oats.

The Tithe Commutation Act required that a detailed survey of land use across the whole of England and Wales be carried out (the Act never applied to Scotland and Ireland), with the production of a map, an apportionment, and a file

for each of the 14,829 tithe districts. 'Fallen Fruits' had no particular need of the tithe file, but the map and the apportionment were the primary source evidence for the final GIS map layer added to MD's layers from Part One.

The 29 Quantock tithe districts examined were mapped between 1837 and 1843 and were originally created in two forms: hand-drawn manuscripts on parchment or, more unusually, lithographic prints on paper. All tithe maps show the boundaries of the tithe district and, like modern Ordnance Survey maps, all indicate area boundaries such as hedges, ditches or walls as a solid line. A number of the maps studied also feature enlarged map sections, most usually of village centres; such additional detail was of course invaluable when digitising the GIS map layer. The same benefit is clear when the original cartographer deployed symbols to show the presence of an orchard or any other type of land use (eg Fig. 3). But whereas half of the maps examined were 'decorated' in this manner, in some instances deciding whether the map showed woodland or an orchard was a problem. The solution was to employ the tithe maps' unique system of plot numbering, whereby each field, plot or area on the map displays a number (eg Fig. 4); a number which, in turn, relates directly to the accompanying tithe apportionment.

The value of the evidence in the apportionments lies in the column of numbers that link to the numbered areas on the tithe map; in the

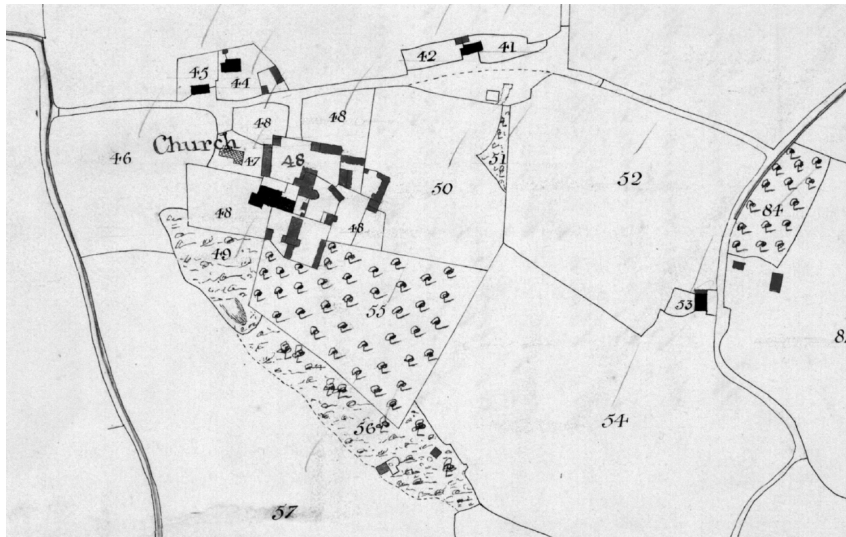
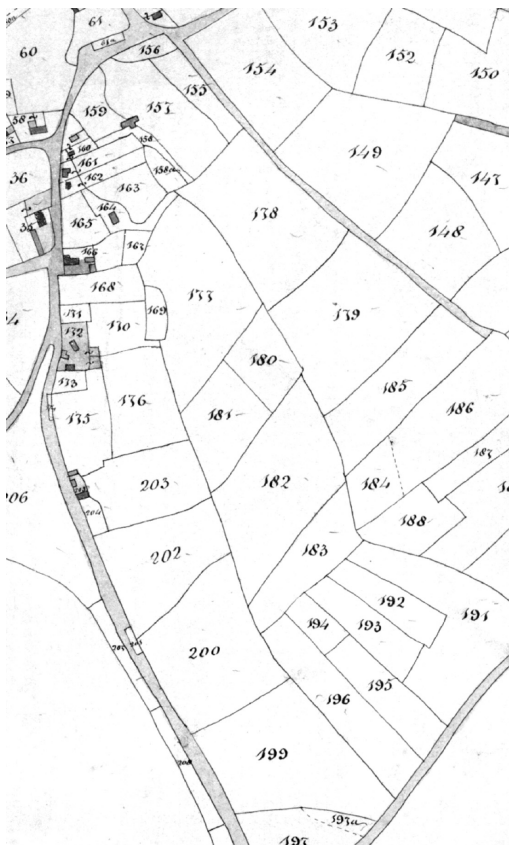


Fig. 3 Section of the Dodington tithe map (1838). The cartographer illustrated orchards on this particular map. © Crown Copyright/Somerset Heritage Centre



apportionment the number further relates to adjacent columns that record the then-current state of land use of that area. Unsurprisingly, the project draws exclusively on one word in that column: 'orchard'. One unplanned benefit of referring to the tithe apportionments is that it allowed us to identify land that had previously been an orchard but had already been abandoned or grubbed out by about 1840.

Having accumulated and assessed the tithe mapping data as outlined above, a new GIS map layer and associated database was added to MD's work on Part One. The methodology was very similar in that it involved plotting and digitising polygon areas in MapInfo to represent a new selection of orchard layers. Part Two of 'Fallen Fruits' consists of four categories of mapped orchards represented in one new layer (Appendix, section 2).

The combination of layers offered the chance to interrogate the GIS and ask numerical and statistical

Fig. 4 Section of the Kilton tithe map (1842). There are several orchards present in the parish, but unlike the Dodington map (Fig. 3) the cartographer did not illustrate them. Instead, reference to the tithe apportionment was needed to confirm their location. © Crown Copyright/Somerset Heritage Centre

questions of its data. Our research revealed an immediate and startling statistic: in the mid 19th century, the Quantock Hills and surrounding parishes supported more than 1400 tithed orchards, covering an area of 644 hectares (or over 900 football pitches), but by 2007 just 11 orchards survived on their original sites (Table 1). Over a period of about 175 years the Quantocks lost 98.5% of these tithed orchards. Independently, Natural England has estimated that since 1950 the overall area of orchards nationwide has declined by 63%.⁴ Our own research in the Quantock Hills shows that, after 20th-century replanting and including new orchard sites, the area has experienced orchard loss of 92.7% (Table 1).

But however dramatic the figures, the 'Fallen Fruits' project must also acknowledge that these are snapshots of historical data set over a considerable time; in particular, there is a hundred-year gap between the tithe surveys and the 1946 aerial photography during which substantial social, economic and environmental change occurred. In an ideal world, we would like to fill in the missing gaps, and we have identified possible data sources. For example, there are the parish-level agricultural census returns that began in about 1880 to report on market gardening and fruit production, and the Land Utilisation surveys of the 1930s and 1960s.⁵ Further work would allow us to answer more specific historical questions. Did orchards expand during the railway age when perishables could be carried quickly to major, previously distant markets? Was apple growing influenced by the so-called Agricultural Depression (1876–1896), when imports of cheap grain from the United States drove many cereal farmers out of business and prompted the expansion of products less vulnerable to cheap

imports, such as perishable fruits and vegetables? As our work revealed more information on orchards in the Quantock Hills, it also stimulated further questions. NN is currently conducting additional research on orchard loss in Kingston St Mary, Cothelstone and Broomfield parishes, primarily referring to early ordnance survey data and the 1930s Land Utilization survey, in order to address the hundred-year gap between sources in our original research.

Our research emphatically indicates how prevalent orchards were in this particular part of Somerset, and just how integrated apple production and consumption were to rural life here. The tithe maps revealed that most farms in the Quantock parishes in the 19th century maintained an orchard, and produced their own cider. In fact, cider constituted a part of a farm labourer's wage (cider 'truck'). Farms often possessed a specially-built cider house (also known as a 'wring house' or 'pound house') where labourers collected their daily cider ration. Cider truck was criticised for its poor quality: 'for the labourer's cider only windfall apples are used . . . or he has the second wringing . . . and which can only be preserved by the addition of four gallons of hop-water to every hogshead, for without this addition it would, from its thinness and inferiority, turn to vinegar'.⁶ And eventually, temperance reformers succeeded in prohibiting payment of cider truck with the 1887 Cider Truck Act. Nonetheless (and despite the dubious quality of the liquid refreshment), the close relationship between farmers, labourers, and the production and consumption of cider persisted into the 20th century. As Philippa Legg explains, cider was provided as refreshment in accordance 'with the weather and work: hay-making and harvesting . . .

TABLE 1: A SUMMARY OF THE NUMBER AND EXTENT OF ORCHARDS IN THE QUANTOCK HILLS, 1838–2007

Data set	Number of orchards	Total area covered by orchards: hectares (acres)
Tithe maps, 1838–1842	1401	644.401 (1592)
Orchard in 1946 unmarked on OS (gone by 2007)	42	47.996 (118)
Orchard in 1946, gone by 2007	125	97.623 (241)
Orchard in 1946 and 2007	29	40.983 (101)
New orchard visible in 2007	30	25.167 (62)
Orchard marked on OS, gone in 1946, replanted by 2007	2	0.995 (2)

Notes: area measurements extracted from the GIS in CRS OSGB 1936 (EPSG: 27700), a Projected Coordinate System.

was hot and tiring work [and] at this time the cider flowed freely, not only to quench thirst but as an incentive to hire extra labour . . . the usual allowance was two quarts a day for a man and one quart for a boy' [one quart = 1.13 litres].⁷

Orchards were by no means restricted to farms, and a striking feature of our maps is the evidence (and extent) of orchards in the very hearts of Quantock villages. Most cottage gardens were given over to fruit trees, being classified (and tithed) as orchards. In addition to farm-based cider production and consumption, it was common for villagers to engage in small-scale production for personal use. While large farms would buy or build their own cider presses, villagers would pool their apples for communal pressing, or take them to farm pressings in return for a cut of the cider. In this way, cider production was a communal activity, an annual event that reinforced communal ties. Larger orchards and farms with an excess of cider supplied local public houses, where cider was popular with working men and women because it was cheap – 1d or 1½d compared to 3d per pint of ale. As such, it was often consumed in prodigious quantities. In 1924, for example, the *Somerset Observer* recorded that a 77-year old farmer at North Curry (just outside the study area) 'according to his own account has drunk on average 14 pints of cider daily for fifty years . . . He is now in perfect health, and has his usual daily allowance'.⁸

Mapping orchard sites using the tithe maps and 1946 and 2007 visual data revealed that orchards had undergone a major decline prior to 1946 (Table 1). The Land Utilisation Survey of Britain reported in its study of Somerset in 1938 that 'the general attitude of farmers [in that area] towards their orchards is that they are an asset'.⁹ However, the depression of the 1930s and the decreasing popularity of cider-drinking (as other drinks became more affordable, accessible and fashionable) led to a decline in small-scale orchards. The downturn was further accelerated in the second half of the 20th century by a government policy of funding farmers to remove or 'grub up' orchards and replace them with cereals and other crops regarded as 'more productive'.¹⁰

What this policy failed to appreciate was the more intimate connections between orchards and place that extend beyond simple 'land use'. After extensive campaigning by groups such as Common Ground (which has been promoting local distinctiveness and diversity since 1982) and the People's Trust for Endangered Species,

traditional orchards – defined as open grown fruit and nut trees set in herbaceous vegetation, commonly grazed (and distinct from densely planted commercial orchards) – were recognised by the government in August 2007 as sites with special biodiversity features, and they are now priority habitats under the UK Biodiversity Action Plan.¹¹ Although its occurrence in Somerset is uncertain, orchards are known to provide important habitat for the Noble Chafer Beetle (*Gnorimus nobilis*) (listed as 'Vulnerable' in the Coleoptera Red Data book), as well as supporting a wide range of bees and other pollinators, in addition to birds, badgers and foxes (creatures that supplement their meaty diets with windfall apples), thus benefiting wider ecosystems.¹² Traditional orchards also host a range of activities from the practical tasks that productive fruit growing requires – grafting, pruning, thinning – to the cultural traditions and customs embedded in the annual cycles of growth and harvest: wassailing, harvesting, and cider-making. The interconnections and entanglements between nature, humans and place is central to the value we place on orchards, and the sense and spirit of place they impart to their locality.¹³

Our mapping identified the extent of orchard loss in the Quantocks. But we also wanted our research to celebrate the importance of the orchard in local life. Our maps provide a resource for members of the public to consult, with prior appointment, in the AONB offices at Fyne Court, Broomfield. Yet, in recognition of the cultural and social value of orchards, we felt there was more that we could do to raise awareness of local orchard history and connect our research findings with people's memories of apples, experiences of growing fruit, enjoyment of eating local produce, and interest in reintroducing orchards into the local landscape.

PART 3: QUANTOCK APPLE HERITAGE DAY

Part Three (AHRC-funded) brought the research team together with Rachel Kelly, a local media expert and events planner, and Georgie Grant, AONB Service Communications Officer, to create Quantock Apple Heritage Day, a community-focused celebration of the role of apples in Quantock life, informed by the project's orchard history research.

Apple Day was launched by Common Ground in October 1990 as 'a celebration and demonstration of the variety we are losing, not just in apples, but

in the richness and diversity of landscape ecology and culture too'.¹⁴ Although 21st October is the designated date, Apple Day events are usually held on a Saturday or Sunday close to the end of the month. 21st October (which, in 2013, fell on a Monday) also happens to be the birthday of Samuel Taylor Coleridge, who spent two very creatively productive years living in the Quantocks in the late 1790s. The preceding weekend was therefore the perfect time to host the first ever Quantock Apple Heritage Day.

On Saturday 19th October, an estimated 600+ members of the public joined the project team, AONB staff, and representatives from the AHRC to celebrate the orchard past, and future, of the Quantock Hills. At the core of the event were poetry performances by Deryn Rees-Jones, Ralph Hoyte, James Crowden, and Pete Stevenson; the latter's energetic singing and musicianship got the children in attendance joining in – and a few adults too. These specially-commissioned apple, orchard and Quantock-themed poems were broadcast by local community-run (Wiveliscombe-based) 10Radio (via their portable broadcast bus, 'Alice'). Triscombe Nursery brought along a range of local apple trees to encourage replanting of heritage varieties. A hog roast proved wildly popular, as did a stall of spiced apple juices. Those seeking stronger refreshment were invited to sample the wares of local cider producers whose presence underscores that apple-growing in the Quantocks remains a viable business.

People were invited to bring apples from their gardens for Liz Copas (National Association of Cider Makers' Orchard Advisor and Field Trial Officer, and author of the definitive guide, *A Somerset Pomona: The Cider Apples of Somerset*) and Les Davies (MBE), an authority on West Country apples, to identify on the day. If they wondered what they could do with their apples, then Brendon Orchards Cooperative and the Mad Apple Cider Company provided some solutions. Brendon Orchards brought its press to make fresh Quantock apple juice from whatever apples attendees threw into the mix; Mad Apple collect unwanted apples from orchards across Somerset to produce cider from fruit that would otherwise go to waste, and were eager to recruit new apple sources.

In addition to apples, we asked people to bring their memories of orchards, which they shared with history student volunteers from Bristol who manned recording equipment throughout the day. The archive of material collected that day gives

real resonance to the project's earlier mapping and archival work. Some of the memories related to parts of Somerset beyond the Quantocks. Peter Turner, of Nimmer, near Chard, recalled living in:

... an old coaching inn in Ilminster, and the garden of that was an orchard, and they were all cider apples. I reckon they used to make the cider to sell in the inn when it was an inn back in the 1860s ... there's a few left. But not as many as there would have been. The whole area was orchards. One of the roads is called Orchard Vale. There were orchards everywhere really.

Yet the strong orchard heritage of the Quantocks was just as evident. And so, too, was the local willingness to reassert an orchard presence. Karol White, for example, had bought a property in Bishop's Lydeard dating from the 1750s and inherited seventeen apple trees, and came to Fyne Court to identify them and learn more about them. A sense of custodianship for old trees and local varieties ran through the testimonies. Christine Powell had communicated with the project team beforehand, and brought apples to be identified and recorded her memories of apples. She remembered eating windfalls as a child:

We bit into them and we just couldn't believe the flavour as kids, they tasted so lovely, to the point where I'd eat probably three or four apples a day. I basically couldn't get enough of them. And we must have eaten a bruised apple because it tasted like cider, so we worked out that if you bashed it on the ground first before you ate it, it was like eating a cider apple. And my Nan said that they were Morgan apples.

For Christine, attendance brought home the realisation of 'how important it was to keep these trees alive'.¹⁵ She contacted the AONB Service after the event and successfully applied for a grant to assist with the replanting of heritage apple varieties in a new orchard, chosen with the help of Stuart Parkman of Triscombe Nurseries. Christine planted the trees 'with four generations of our family to mark the event as we really feel we're making history'. The Powell family cannot wait to 'harvest the apples and share them with friends, family and Open Door – the Taunton charity for the homeless'.

This early feedback demonstrates the tangible impact of our research into the orchard heritage of the Quantock Hills. Christine's story connects the orchard past of the Quantocks area with a future that respects and reflects this heritage, firmly grounded in a sense of place and local identity. We

have shown, in an accessible way, the importance of apples to rural life and landscape; but, undoubtedly, it was being able to share this with Quantock communities and, in turn, learn from them, that has made this project a such success.

CONCLUSION

The 'Fallen Fruits' project demonstrates that from one small seed of an idea, a great project with many branches can grow, thanks to a collaborative approach that emphasised knowledge exchange and community involvement. Historical research was at the core from start to finish. The decision to make the major output map-based rather than text-based married the interests of the AONB Service and us, the historians, to produce a resource on orchard decline that was publicly accessible in terms of format and ease of use. This project locates itself within a growing area in the arts and humanities that is using mapping as a research method and as a way of assembling and disseminating research. The approach has found particular traction within the so-called 'Environmental Humanities', an emerging concept within the wider humanities that is aiming to bring those working across disciplines and borders on matters of nature, place, landscape, environment and society together as a cohesive research community, encouraging collaboration, knowledge-sharing, and engagement with policy, public and non-humanities scholars.¹⁶

Our maps are available for public consultation at the AONB Service headquarters at Fyne Court. We hope that the success of Quantock Apple Heritage Day in communicating with, and inspiring, local people to embrace their orchard heritage can also be continued. With this in mind, there are funds available from the AONB Service to support fruit-tree planting in the Quantocks area.¹⁷ In addition, Somerset County Council currently has funds for orchard planting, thanks to the Heritage Lottery Fund and a donation from Shepton Mallet Cider Mills, that they are distributing with the Farming and Wildlife Advisory Group (SW) until March 2015.¹⁸ We are, however, deeply troubled to hear of Somerset County Council's proposed funding cuts to the Quantock Hills AONB Service of 89% for the year 2015-16.¹⁹ These cuts have serious implications for the environmental management and community enjoyment of an area categorised by law as 'outstanding', well known nationally and internationally as a poetic landscape associated

with Coleridge and Wordsworth – and now also recognised as a historic landscape of orchards.

APPENDIX: A NOTE ON THE ORCHARD 'MAPPING LAYERS' USED FOR MAPPING ORCHARD DECLINE

Our mapping identified orchards at different stages of decline, over a period of time. In order to illustrate change and differentiate between varying states of orchards, we produced multiple layers of mapped orchards that overlay OS maps and aerial photographs. These coloured layers are lost somewhat in a single black-and-white reproduction, so we encourage you to consult the original map layers held at Fyne Court, headquarters of the Quantock Hills AONB Service, if you are interested in learning more about orchard decline in the area. The layer keys below provide a sense of the many different stages of orchard decline we identified.

1. ORCHARD LAYER KEY, PART ONE:

Colour	Type of Orchard
Red	Orchard in 1946, gone by 2007
Green	Orchard in 1946 and 2007
Yellow	New orchard visible in 2007
Pink	Orchard in 1946, remnants in 2007
Brown	Marked on OS, gone by 1946
Black	Unknown in 1946 (gap in aerial map)
Turquoise	orchard in 1946 unmarked on OS (gone by 2007)
White	Remnants of an orchard in 1946 (gone by 2007)
Grey	Orchard marked on OS, gone in 1946, replanted by 2007

2. ORCHARD LAYER KEY, PART TWO:

Hatching Colour	Type of Orchard
Wine red	Orchard on 19th-century tithe maps and apportionments
Yellow	Mixed use: orchard and pasture/meadow, etc.
Purple	Possible orchard
Olive	Remnant orchard assumed from 19th-century tithe maps and apportionments

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Endnotes

- ¹ The Arts and Humanities Research Council is a statutory UK government research council, on a par with other research councils such as the Economic and Social Research Council (ESRC), Natural Environment Research Council (NERC) and Medical Research Council (MRC), which are constituent bodies of Research Councils UK (RCUK).
- ² See Natural England's website, 'First ever survey of traditional orchards from the air', 5 May 2011 <<http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/050511.aspx>>; and the PTES website, 'Traditional Orchard Survey', undated, for more information on the Traditional Orchard Survey <http://www.ptes.org/?page=203> (accessed 19 March 2013).
- ³ Because all GIS systems automatically rely on real-world coordinate systems, the project outputs can be viewed and analysed alongside third-party GIS data such as Natural England's 'Traditional Orchard Project in England'.
- ⁴ Natural England Commissioned Report NECR077, 'Traditional Orchard Project in England: The creation of an inventory to support the UK Habitat Action Plan' (5 May 2011), foreword.
- ⁵ To date, neither Land Utilisation Survey has been made available in a form that might be integrated reliably into 'Fallen Fruits'.
- ⁶ George Sainsbury, quoted in Philippa Legg, *So Merry Let Us Be . . . The Living Tradition of Somerset Cider* (Bridgwater: Somerset County Council Library Service, 1986), 20.
- ⁷ Legg, *So Merry Let Us Be*, 20.
- ⁸ Legg, *So Merry Let Us Be*, 18.
- ⁹ T. Stuart Monteath, 'Part 86: Somerset', as quoted in L. Dudley Stamp (ed.), *The Land of Britain: The*

Report of the Land Utilisation Survey of Britain (London: Geographical Publications, 1938).

- ¹⁰ The EC Orchard Grubbing Up Scheme closed on 31 January 1995: House of Lords Debate, 13 June 1996, *Hansard*, vol. 572, c181WA. For more on the decline of small-scale cider producers and rise of large commercial cider firms, see Legg, *So Merry Let Us Be*.
- ¹¹ Joint Nature Conservation Committee, 'UK Biodiversity Action Plan Priority Habitat Descriptions: Traditional Orchards' (2008)
- ¹² Natural England Research Report NERR 025, 'Biodiversity Studies of six traditional orchards in England' (23 April 2009).
- ¹³ See also Paul Cloke and Owain Jones, 'Dwelling, place and landscape: an orchard in Somerset', *Environment and Planning A* (2001), 33, 649–66.
- ¹⁴ Common Ground, 'Apple Day' <<http://commonground.org.uk/portfolio/apple-day/>> (accessed 19 March 2013).
- ¹⁵ Christine Powell, quoted in Georgie Grant, 'A New Orchard at Seven Ash Inspired by Apple Day' blog post for the Quantock Hills AONB Service website (18 March 2014) < http://www.quantockhills.com/blog/view/a_new_orchard_at_seven_ash_inspired_by_apple_day/>
- ¹⁶ 'Fallen Fruits: Mapping Orchard Decline in the Quantock Hills' has been cited as an example of the innovative approaches that the arts and humanities research sector can bring to the study of environment and landscape from an Ecosystem Services perspective. See Peter Coates, et al., 'Arts and Humanities: Perspectives on Cultural Ecosystem Services. Arts and Humanities Working Group, Final Report' (Cambridge: World Conservation Monitoring Centre/National Ecosystem Assessment, Follow-on Phase/Defra, 2014). 'Fallen Fruits' was also the subject of a paper that Coates delivered as part of a panel discussion on the relationship between public history and environmental history at the annual conference of the American Society for Environmental History, San Francisco, USA, 15 March 2014.
- ¹⁷ For further information contact Iain Porter: IPorter@somerset.gov.uk
- ¹⁸ For information about Somerset County Council's funding schemes, contact Joy Williams: jewilliams@somerset.gov.uk
- ¹⁹ As announced in February 2014 by Cllr Anthony Trollope-Bellew, Chairman of the Quantock Hills AONB Joint Advisory Committee, via the AONB Service blog: < http://www.quantockhills.com/news/article/quantocks_at_risk_from_proposed_funding_cuts/>