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Historic England

Traditional Thatching Materials

Issues Affecting a Sustainable Future

Jenny Chesher

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Historic England,
The Engine House
Fire Fly Avenue
Swindon
SN2 2EH

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For more information email Res.reports@HistoricEngland.org.uk or write to:

Historic England
Fort Cumberland
Fort Cumberland Road
Eastney
Portsmouth PO4 9LD

Summary

This report presents the results of research into the challenges facing indigenous producers of cereal straw and water reed for traditional thatching. It describes what the sector is already doing to overcome some of these problems and suggests further action to address other issues and help ensure a sustainable supply of thatching material in the future. It has been written following in-depth discussions with various producers, followed by extensive consultation with the thatch-production sector to gather a wide range of views and ideas. The findings show that changing weather patterns, cost and availability of machinery and escalating rural land values affect both water reed and straw production. Lack of availability of seasonal labour is a particular problem for straw producers. New reed cutters have limited access to suitable reedbeds, and there is a perceived conflict between nature conservation and commercial reed production that creates further barriers. The ageing demographic of the thatch-production sector and lack of training and mentoring are also concerns. Whilst some issues are being tackled by individual producers, it is likely that more collaborative action will be needed to address others.

Author

Jenny Chesher, Traditional Thatch Project Manager, Historic England

Contributors

Michael Ambrose, Alison Henry (Historic England), Catherine Marlow (Historic England), Richard Starling (Broads Reed and Sedge Cutters Association), Paul Watkin (National Thatching Straw Growers Association).

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Front cover image: Harvesting thatching straw with a reaper binder in Somerset.

Archive location

Historic England Archive, The Engine House, Fire Fly Avenue, Swindon SN2 2EH

Date of research

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Contact details

Historic England, The Engine House, Fire Fly Avenue, Swindon SN2 2EH

Conservation@HistoricEngland.org.uk

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1 Introduction

1.1 Background to report

Thatch is a traditional roofing material in many parts of England. It has rich regional traditions that contribute to the local distinctiveness of vernacular buildings. Historic England encourages the use of traditional materials, techniques and skills to maintain regional diversity and conserve the character of historic buildings and areas. A key factor in this is the availability of good quality thatch materials.

In 2020, adverse weather led to a particularly poor wheat harvest in England and a shortage of thatching straw over the following 12 months. In response to increasing pressure on local planning authorities to accept changes of thatching materials on listed buildings, Historic England contacted straw growers and thatchers to find out more about the extent of the shortage and understand the steps they were taking to cope.

In April 2021, we published guidance on how to avoid a permanent change of materials on listed buildings where it would be harmful to historic character and significance.

The information gained from straw growers and thatchers in 2020 revealed underlying problems in thatch material supply that run much deeper than a single poor harvest and that relate not just to wheat straw but to water reed as well. This raised questions about the long-term sustainability of traditional thatch material supply.

To better understand the problem, in October 2021 we started the Traditional Thatch Project to investigate a range of issues relating to the supply of materials for traditional thatching. The first stage of the project – and the subject of this report – was to identify the challenges facing producers of indigenous thatching straw and water reed. A later stage will investigate issues affecting the supply of woodland products that are used as fixings for thatch.

With an understanding of these problems, we hope to identify those which might be mitigated, addressed or overcome through measures such as further research, collaboration, policy changes, funding, training, investment or technological developments.

Ultimately, it is hoped that the project will lead to constructive and practical steps towards securing a more predictable and sustainable supply of good-quality indigenous thatching materials in the medium and long-term.

1.2 Purpose of this report

This report has been produced following discussion by Historic England with thatching straw growers, water reed producers and thatching-material dealers between October 2021 and March 2022, and includes comments gathered from a wide group of experts and stakeholders via a consultation process undertaken in April – May 2022. It records the issues that they have told us are affecting (or could affect) the availability of indigenous traditional thatching materials in England. The report also describes the steps already being taking by the sector to address some of the problems and includes suggestions from the contributors of other possible ways of addressing, mitigating or overcoming these issues.

It is inevitable that – with limited resources – we won't have captured every issue affecting every grower, producer or dealer, and of course new problems and issues may arise in the future. However, this report is a starting point that we can use to develop recommendations for further action. We hope that it will also provide the evidence we need to lobby policy makers and funders to support the thatch-supply industry.

This report forms part of the ongoing Traditional Thatch Project and will be periodically reviewed and updated if necessary. We therefore welcome feedback on it and constructive suggestions relating to the issues it raises.

2 Factors affecting production of straw for thatching

2.1 Weather

Issue

Extreme or unexpected weather events are occurring more frequently and can happen at different stages of the growing season. Drilling, cultivating and harvesting wheat for thatching is becoming progressively more challenging as the weather is becoming more unpredictable. This could lead to more poor harvests such as that of 2020.

This issue is an over-arching one which exacerbates other problems created by workforce shortages and machinery reliability. Having less predictable weather creates an even greater need for making the harvesting process as efficient as possible, to maximise the increasingly limited opportunities of fine, settled weather.

Impact on straw production

There have always been occasional years when adverse weather conditions have harmed wheat straw harvests, eventualities which the market has generally coped with by re-balancing supply and demand in subsequent years. However, the apparent trend for more frequent or extreme harvest failures could create more serious and potentially longer-lasting shortages of thatching straw.

Extreme weather at any point throughout the growing year can affect the development of the crop. Wheat grown for thatching straw is particularly vulnerable to climate conditions which affect the height, strength and consistency of the stem.

Harvesting a large acreage of straw can be particularly challenging in wet weather owing to the time it takes to reap and stook the wheat. However, poor harvests also affect the morale of the smaller-scale growers, and particularly those thatchers who also grow their own wheat (who may have less flexibility regarding the timing of their harvest and less assistance with it) to the point where a number are reporting that they have given up, or are on the point of giving up, growing wheat themselves. This will only exacerbate the shortage of indigenous thatching straw.

Summer droughts and heatwaves can also have implications for straw harvesting which are being monitored by some growers following the harvest of 2022 when there were record high temperatures. Intense heat can affect the productivity of labourers, whilst the rapid drying out of cereal stems cut in extremely high temperatures could make them become brittle and vulnerable to damage whilst being handled or processed.

Contributory factors

- Wet autumns can delay drilling or flood newly drilled seed, inhibiting early germination or growth, or drowning the seed.
- A dry spring can stunt wheat growth, meaning that it does not reach the necessary length for thatching or develops stems of inconsistent height.
- Lack of sunshine and warmth during the summer can delay ripening and development of wheat.
- Due to their height, the traditional varieties of wheat being widely grown tend to lodge (buckle low down) in heavy rain or high winds and this can cause weakening of the straw walls and increased vulnerability to fungal decay.
- Wet summers make harvesting more problematic, particularly for growers with large acreages who need several consecutive weeks of dry weather to cut and stook their crop.
- Interruptions to the harvest also compound problems with the availability of labour, making seasonal employment even more expensive.
- Prolonged summer rainfall can result in the grain sprouting in stooked sheaves, spoiling the grain or making it difficult to save for seed, plus also encouraging weed growth around the stooks which hampers drying of the sheaves.
- A shortage of affordable/available storage buildings for thatchers (see section 2.5) means that many have to get thatching straw delivered directly to the site of their thatching jobs, where it is difficult to keep it protected from the elements.

What measures are already being taken to mitigate this issue?

Some growers report that they are reducing the area of land they cultivate for thatching straw, whilst others are more selective in the varieties they now grow. The increase in the cultivation of triticale may well be a response to this issue, as it is reported by some to be more resilient to weather extremes although opinions on this differ.

Experimentation by growers/producers with different forms of mechanisation during harvesting has also been reported – both for cutting and handling the straw – to accelerate the process of harvesting and make it less vulnerable to adverse weather conditions.

The National Thatching Straw Growers Association reports that it offers advice on husbandry techniques to new members and prospective growers. It has previously undertaken research into older wheat varieties that might be suitable for thatching straw and extend the window of harvesting, thereby reducing the vulnerability of growers to extreme weather events.

Possible further measures to address or mitigate this issue

- Grant schemes aimed at encouraging more sustainable land use and agricultural practices could potentially be compatible with the low-input, more environmentally friendly methods adopted for production of both thatching straw and water reed in the UK and could incentivise their production and provide a form of 'insurance' against a failed harvest.
- Develop wheat varieties which are more resilient to extreme climate situations or develop wheat populations that could adapt over years to local soil and weather conditions (and/or research which of the currently available varieties and populations are most weather resilient) and increase availability of a wider range of seed varieties for commercial sale (see section 2.2).
- Encourage the cultivation of wheat for thatching straw across a wider geographic area of the country to mitigate the risk of crop loss/damage due to localised adverse weather events.
- Adapt cultivation techniques to cope better with extreme climate situations.
- Investigate ways of accelerating the harvesting process to make it less vulnerable to spells of prolonged summer rain without compromising on quality of the end product.
- Consider methods of harvesting and processing straw that are more suitable for small scale production.

Who might be involved?

- Agronomists
- Plant breeders
- Agricultural research establishments
- National Thatching Straw Growers Association/straw growers
- National Farmers Union (NFU)
- Environmental charities with an interest in sustainable land management issues
- Funders of environmental grant schemes e.g. Natural England, Department for Environment, Food and Rural Affairs (DEFRA), Environment Agency etc.
- Thatching organisations/associations/societies.

Potential next steps

- Review previous research into developing more climate-change-resilient wheat varieties and populations or other currently available wheat varieties and populations that might form the starting point for climate-change-resilience assessment, to assess their relevance to the production of thatching straw; then consider the need to commission further targeted research into bespoke thatching straw varieties or populations (see section 2.2).
- Undertake trials to experiment with different cultivation/harvesting techniques which could make the process of straw production more efficient in the face of unpredictable weather and shortages of labour.
- Discuss with other government agencies the scope for including the cultivation of wheat for thatching straw within agricultural grant schemes, as a way of incentivising farmers and mitigating the risk of crop failure as a result of poor weather.
- Investigate, amongst current growers, the use of later-maturing wheat varieties, which allow growers to have an extended window of time for harvesting different crops, thereby mitigating the risk of having to harvest in adverse conditions.
- Research amongst current growers existing methods of cultivation and harvesting being used to minimise the risk to the crop from extreme weather events and investigate other potential measures that could be taken.

2.2 Limited commercial availability of wheat varieties suitable for thatching straw

Issue

Historically, all cultivated wheat had long stems. Straw for thatching was a by-product of the grain production and was in plentiful supply. The introduction of shorter varieties of wheat in the early 1970s allowed for dramatically increased grain yield with little risk of the crop lodging. Within a few years, as commercial breeding focused on reduced height and extra yield, all new commercial varieties were short-strawed and therefore unsuitable for thatching. The sale and distribution of modern varieties is the main priority of commercial seed merchants. Only a few older varieties with a usable length of straw have been maintained. Many of the varieties of wheat now grown to produce thatching straw are not commercially available as seed or legally registered for sale, since they have such a limited market or are not authorised by the Animal and Plant Health Agency (APHA). Instead, growers have to repeatedly harvest and save the seed from their own crops.

Impact on thatch production

The gene pool of wheat varieties that are suitable and currently grown for thatching has becoming very restricted. The limited pool of seed that is commercially available also restricts the development and adoption of new more weather-tolerant or adaptable varieties or populations for thatching use.

Contributory factors

- A lack of meaningful financial support to incentivise the multiplication, production and utilisation of a wider range of wheat varieties suitable for the production of thatching straw.
- The commercial sale of grain seed is limited to those varieties for which there is the largest demand in the agricultural sector. Growing wheat for thatching is a very small and specialist market compared to that for wheat grown for its grain. This is a disincentive for the commercial seed suppliers to stock varieties for which there is a much lower demand.
- It is illegal to sell seed varieties not approved by APHA. Some contributors to this report have noted that, in practice, APHA overlooks low levels of seed exchanges, so in niche sectors, such as thatching straw production, the rules are less likely to be enforced. Nonetheless, such regulation is likely to be a disincentive to some potential growers.

- The economics and sustainability of this market are further undermined by year-to-year fluctuations in the demand for seed for sowing, following years of high straw yields when there is an abundance of material and therefore less demand for seed the following autumn. This reduction in demand can create a further disincentive for seed sellers.
- The small scale and fragmented nature of the thatching-straw-growing sector makes it difficult for it to co-ordinate, develop or undertake large scale, multi-year assessment of wider germplasm that might prove useful for enlarging the pool of adapted varieties.
- Many thatching straw growers are small-scale enterprises so even the lower entry barriers of costs and administration which are involved in becoming a registered maintainer of a conservation variety under APHA's 'Conservation Varieties' scheme is seen as too onerous.
- Competition from imported wheat and triticale reduces the incentive to invest in registering conservation varieties of wheat for thatching.

What measures are already being taken to mitigate this issue?

In 2013-14, the National Thatching Straw Growers Association (NTSGA) undertook trials and identified heritage varieties with specific points of difference to take forward for registration as conservation varieties.

Informal networks exist to share seeds of suitable wheat varieties and assist new growers.

Over the past two decades, the organic farming sector has been actively involved in increasing the diversity of wheat crops through the development of participatory 'evolutionary' plant breeding research aimed at producing populations that are more buffered to soil, climate, pests and diseases. Unlike standard pure-breeding varieties, these have the capacity to adapt to local conditions over successive generations. Two approaches have been used; the first is the production of mixtures through the simple pooling of varying sets of different varieties and in some cases different wheat species. The second approach involves performing genetic crosses between a diverse set of parental varieties to produce highly diverse populations in a process known as composite cross populations (CCPs). Because CCPs involve genetic crosses that result in genetic recombination which generates novel gene combinations, the resultant populations are very much more diverse than straightforward mixtures. Crucially for the thatching industry, some of these populations and mixtures involved long strawed types.

The development of wheat populations by the organic farming sector was coupled with a long campaign to facilitate their formal registration as 'organic heterogeneous materials' to allow their legal production and marketing. This was successfully achieved with their inclusion in EU Organic Regulation EU/848/2018 which came into force at the start of

2022. Materials produced in Northern Ireland can be registered under that Regulation. A consultation on a similar relaxation of regulations in the UK was undertaken by DEFRA in January 2023, the results of which are currently awaited.

Possible further measures to address this issue

- Lobby for changes to simplify and/or expand the APHA system to make it more inclusive of heritage wheat varieties and those suitable for the production of thatching straw and facilitate supply.
- Organise demonstration plots of wider seedbank holdings of heritage varieties, such as those organised by the Germplasm Resource Unit at the John Innes Centre (Norwich) some years ago[1]. If rolled out at targeted agricultural colleges in thatching regions, it might offer growers and thatchers opportunities to identify varieties of interest for further on-farm assessment.
- Investigate collaboration with other participatory plant breeding projects such as those being pursued by the heritage/organic grain sector (aimed at producing traditional cereals for bread and other foods), which have proved successful in developing the genetic variation from which individual growers can select to cultivate and develop on their own land.
- Research other public-sector wheat populations that include significant numbers of heritage wheats in the original rounds of crosses but have not been assessed for their suitability for thatching. Public sector wheat populations were developed by the National Institute of Agricultural Botany (NIAB) and the John Innes Centre (JIC) using public funding, to allow genetic mapping of agronomic traits. The materials generated are available for use and further development and might be useful for growers to make their own selections based on standing ability, suitability to local conditions and straw characteristics.
- Lobby for the incentivisation of the multiplication and use of a wider range of suitable populations and varieties through government grants and other subsidy schemes, linking to environmental benefits of growing wheat for thatching straw.
- Develop standards to achieve consistent quality and purity of farm-saved seed for thatching straw wheat varieties by publishing guidance on best practice.

[1] (47) GRU Information Resource 4: Growing Demonstration of UK Heritage Wheats - YouTube

Who might be involved?

- Plant genetic and other agricultural research organisations e.g. NIAB (formerly known as the National Institute for Agricultural Botany), John Innes Centre, Organic Research Centre
- DEFRA and Animal & Plant Health Agency (Plant Varieties & Seeds Group)
- Small-scale growers including thatchers
- Larger-scale commercial growers
- National Thatching Straw Growers Association
- Thatching organisations/associations/societies
- Agricultural colleges
- Commercial wheat seed suppliers
- Heritage grain organisations/growers/researchers
- Relevant educational/funding organisations such as Gaia Foundation.

Potential next steps

- Review previous research into the suitability of existing wheat varieties for thatching and assess the need to develop new varieties or populations.
- Document the wheat varieties currently being grown for thatching straw and note their characteristics.
- Develop good practice guidance on maintaining minimal standards of seed purity and quality for farm-saved seed by seeking advice from plant breeders and gene banks.
- Initiate and co-ordinate dialogue between seed companies, plant researchers and the thatching sector to facilitate development of wheat varieties which have greater climate resilience whilst also being compatible with the performance requirements of thatching straw.
- Approach relevant organisations and individuals including those in the developing ‘heritage grain’ movement to investigate the scope to collaborate to promote the availability of seed varieties and populations which could be compatible with the production of thatching straw.
- Coordinate the development and production of wheat that could have dual use, for example, artisan baking and thatching straw.
- Consider setting up a growing trial in the south or south west of England for varieties and populations of wheat to assess their suitability for producing straw for combed wheat reed thatch.

2.3 Availability of Labour

Issue

The harvesting and processing of thatching straw is a highly labour-intensive operation, particularly for those growers still using traditional methods and machinery. Most commercial growers and producers of thatching straw interviewed stated that they have traditionally relied on foreign seasonal labour (mainly from the EU) for harvesting and processing wheat. This is because they have found that foreign labour provides the most predictable source of reliable, industrious and experienced workers, who can be employed on a short-term basis at an affordable level.

Since Brexit, the current legal restrictions in numbers of foreign workers able to come to the UK for seasonal employment has hit the industry hard. The problem has left some growers struggling to source sufficient overseas labour and facing escalating costs and unreliability of local workers. It is one of the most widely reported difficulties amongst the people we contacted, and growers and producers only expect it worsen in future years.

Impact on thatch production

In the short term, the shortage of labour is causing some growers to reduce the acreage on which they are growing straw, to make harvesting more manageable.

For those thatchers who grow their own straw on a small scale, the economics of taking time off from thatching in the middle of the summer to harvest their straw is becoming increasingly marginal, to the point where they are considering giving up straw production or have already done so.

Generally, the labour shortage is creating such a climate of uncertainty for growers/producers that they are expressing considerable pessimism about their ability to continue operating economically on a medium-term basis or making long-term succession plans for their business.

Contributory factors

- Changes to government policy on immigration and new restrictions on work permits for seasonal foreign workers following Brexit have had a major impact on farmers' ability to source seasonal labour from outside the UK. A pilot seasonal workers scheme introduced in 2019 is limited in its scope and doesn't apply to the thatching straw or reed producers.
- Restrictive HMRC tax rules on the flexible employment of casual labourers or family members for harvesting (farmers must use the more bureaucratic PAYE system for family members or if the work extends beyond two weeks).

- The impact of Brexit and COVID-19 on travel movements has reduced workforce availability.
- Thatcher-growers can earn more money thatching than harvesting and processing straw. Because labour costs are so high, the value of the straw they produce no longer offsets the loss of income from thatching.
- The cost of housing in rural areas (which had already been high for years, but which has increased significantly since the start of the COVID-19 pandemic) means that some people who might potentially be willing and able to do farm labouring work cannot afford to live in the areas where the work is to be found or to travel to it from further afield.

What measures are already being taken to mitigate this issue?

Growers and producers have adopted a range of interim measures, but none offer long-term certainty, and most involve extra expense or are a less reliable source of labour. They include:

- Applying for part-settled status for foreign workers who regularly work for them on a seasonal basis (this allows interim access to work in the UK for those workers whilst their application is being processed).
- Using only foreign labourers who are already employed in the UK and can take time out from their regular work.
- Sourcing workers from students or the local labour market, but this can be at the cost of a considerably higher hourly rate and less reliability.
- Some smaller growers are banding together to share labour.
- Some growers are enlisting the help of their thatcher clients during harvest or having more formal business collaborations with thatchers including shared contributions of labour/machinery.
- Some thatcher-growers have had to resort to using their thatcher employees for harvesting in the absence of seasonal workers, which works out more expensive and depletes their thatching workforce at a time of highest demand.
- Relying on friends/family and managing with fewer people, which means slower work or modifying the process.
- Reducing the acreage of crops grown for thatching straw.
- Changing traditional harvesting systems or processes to be more mechanised, and therefore less labour intensive and time-consuming. Opinions vary on such modifications, but some growers are adopting a range of measures including:

  - head-stripping the straw before cutting in order to streamline the threshing process
  - using Howard balers or other machinery to gather the straw bundles in the field to try to reduce double handling
  - in hot summers, leaving the straw lying down in the field to dry after cutting rather than stooking.

Possible further measures to address this issue

- Changes to the rules for issuing seasonal work permits in the wider sector and the addition of thatching straw production to the list of horticultural categories eligible for the government's pilot temporary worker scheme.
- Relaxing tax rules to provide more flexibility regarding the employment of casual or family labour for harvesting thatching straw.
- Exploring the possibility of growers making use of Worldwide Opportunities on Organic Farms (WWOOF) or similar volunteer schemes for straw harvesting on smaller farms.
- Growers connecting with local agricultural colleges or organisations supporting new entrants to farming as a potential seasonal labour source and to also raise awareness of straw production as a farming activity.
- Bursaries to provide extra training to educate new growers and young farmers in growing wheat for the production of thatching straw.
- Collaboration between small-scale growers or between growers and thatchers over a shared labour 'pool' during peak harvesting and threshing times.
- Making large-scale harvesting and processing more efficient and highly mechanised so that it is less reliant on manual labour.
- The National Society of Master Thatchers is planning to incorporate days spent assisting with straw harvests into the training of their thatcher apprentices.

Who might be involved?

- National Thatching Straw Growers Association and interested growers
- Thatching organisations/associations/societies/individual thatchers
- DEFRA
- Organisations representing or supporting smaller-scale farming enterprises and new entrants to farming including the Landworkers Alliance, WWOOF, Forces Farming etc.
- Agricultural and land-based skill colleges

- Funding bodies for countryside management and rural development schemes
- See section 2.4 in relation to the machinery issue and potential for reducing labour requirements through greater mechanisation of the process

Possible next steps

- Collate and present evidence to DEFRA, the Migration Advisory Committee (Home Office) and HMRC regarding the impact on thatch production of the current restrictions on foreign worker permits and tax rules for employing casual and family labour, in order to lobby for change.
- Obtain advice and pool ideas amongst growers for sourcing seasonal labour more successfully in the UK, including targeting potential workforces.
- Approach a wider range of organisations including agricultural colleges, the WWOOF network, Landworkers' Alliance, Forces Farming, Chalk to Fork and vintage machinery enthusiasts etc. to find new sources of seasonal labour.

2.4 Reliance on old or inefficient machinery

Issue

The process of harvesting and threshing straw for thatching is, by modern agricultural standards, protracted and extremely labour intensive. Because it is a niche sector of the overall agricultural industry, a lack of investment means that the methods and equipment being used by most growers/contractors have barely changed in 100 years. Growers are generally relying upon old, often antique, machinery which is difficult to operate and not compliant with modern health and safety standards. In many cases, this machinery is unreliable, its parts are obsolete, and it is reaching the end of its useful life. Many growers have to undertake time-consuming maintenance themselves and keep multiple spare machines or parts for when breakdowns occur. Due to health and safety issues, it is also becoming more difficult to obtain employers' liability insurance for threshing and reed-combing. However, there is no readily available source of suitable replacement machinery nor a commercially available modern alternative in the UK.

Impact on thatch production

The antiquated nature of the threshing machinery, in particular, makes it inefficient to use by modern standards, requiring multiple people to operate it and protracting straw processing.

Frequent breakdowns of machinery, difficulties sourcing replacement parts and the time taken to effect repairs delay the harvesting and threshing process, wasting time, money and labour and causing stress to the workforce, all of which affect the economics of the process.

Contributory factors

- The machinery generally used in the production of thatching straw in England is no longer manufactured and consequently in short supply and only available on the second-hand/vintage machinery market.
- Due to its age, breakdowns are common, spares are not readily available and generally have to be specially engineered or sourced by cannibalising other old machines.
- The processes involving this old machinery are dusty, inefficient and risky, which in turn affects the supply of workforce prepared to work with them.
- Because the production of straw and water reed for thatching is such a specialist and niche market, there is little incentive for agricultural machinery designers or manufacturers to produce new machinery suitable for the job.

What measures are already being taken to mitigate this issue?

Some growers have apparently imported newer machinery from abroad, but as it isn't purpose-designed for the production of thatching straw/reed in the UK, it isn't necessarily the most efficient equipment for the process.

Otherwise, growers and contractors are having to buy old machinery as it becomes available, even if it isn't functional, to use for spares and repairs as needed. Most of those who use such machinery have had to develop specialist skills to maintain it and spend a considerable amount of time in doing so.

Some growers don't undertake the harvesting or threshing themselves but use contractors who have the specialist machinery. However, this leaves the growers less in control of the timing of the straw processing, and those contractors still face the same problems with old machinery.

The smaller thatcher-growers often collaborate with each other on the use and ownership of machinery.

Possible further measures to address this issue

- Adoption of a national strategic approach towards the preservation and reuse of vintage harvesting and threshing machinery along with a sale/exchange database from which any available working machines and spare parts could be sourced.
- Greater collaboration between smaller-scale thatching straw producers and the vintage agricultural machinery sector, who might be willing to put their machinery to more practical use.
- Involve rural folk and farming museums who hold vintage machinery in their collections and have access to extensive experience/skilled volunteer labour forces to maintain such machinery.
- Undertake an audit of the range of equipment currently being used by growers and producers/contractors in the production of thatching straw to find out what innovations in machinery are already being used or imported which could make the process more efficient and safer across the board.
- Undertake a feasibility study into the sourcing/designing/production of suitable machinery to make efficiency and safety improvements in harvesting and processing straw for thatching.

- Encourage public investment in the design of bespoke and modern machinery for the more efficient production of thatch, perhaps in liaison with relevant social enterprises in that field, willing to invest time and money in the production of safer and more efficient machinery which could have a public benefit.
- Canvas ideas from experienced growers and producers of thatch regarding the critical improvements that need to be made to machinery, in particular with regard to threshing straw, in order to produce a brief for the most efficient design.
- Approach engineering departments at universities, to enlist the enthusiasm and skill of their students in designing new bespoke machinery.
- Contact the Agricultural Engineers Association to highlight the problem and seek suggestions/input from its members.
- Consult on setting up regional machinery collectives and thatch production centres to centralise the threshing process, meaning that not all growers need to own their own machinery or buildings and processing could be undertaken collaboratively and more efficiently. The centres could also potentially provide storage for spare parts/machines for communal use.
- Lobby for the continuation of the DEFRA Adding Value Farming Investment Fund and any other relevant government grants from which straw growers can potentially benefit from funding for investment in machinery.
- Investigate availability of other grant aid for more modern straw harvesting/processing machinery (where suitable machinery exists) through the Farming in Protected Landscapes funding scheme or other similar schemes in eligible areas.
- Contact the Gaia Foundation regarding the potential for any collaboration/funding since there are parallels with the research it funded into machinery for small-scale grain production in the Scottish Highlands.

Who might be involved?

- National Thatching Straw Growers Association/individual straw producers/growers
- National Society of Master Thatchers Ltd, Society for the Protection of Ancient Buildings and the Thatch Advice Centre, who have all expressed an interest in this issue
- Vintage machinery specialists and rural life/farming museums
- Universities and colleges with relevant agricultural engineering courses

- Agricultural Engineers Association/Institution of Agricultural Engineers
- Agricultural machinery innovators/designers
- Historic Environment Scotland
- Gaia Foundation.

Possible next steps

- Investigate the feasibility of introducing regional thatch processing centres through consultation with existing straw growers and producers and potential new growers.
- Commission a report into the availability of modern machinery (either in UK or abroad) which could be used/adapted for harvesting and processing thatching straw more efficiently.
- Follow-up that report with an approach to agricultural engineering courses/associations/manufacturers to investigate the feasibility of designing new machines for harvesting and processing thatching straw.

2.5 Shortage of storage buildings for materials and machinery

Issue

Many growers report a shortage of affordable and suitable storage buildings for materials and machinery.

Once harvested, thatching straw needs to be stored in an accessible, secure, well-ventilated and rodent-free area, away from potential sources of damp. Un-threshed straw needs to be kept separate from threshed straw.

Due to the volume of straw produced (some of the larger suppliers produce between 150-400 tonnes of straw, and also deal in straw grown by others), it ideally requires large, wide-span, modern barns. Rodent control is a frequent problem since extensive damage can be caused to the straw crop whilst being stored.

Machinery similarly needs to be kept both secure and dry, with theft becoming a growing rural crime problem. A workshop area is also helpful for the frequently needed repairs.

Being able to thresh straw under-cover is extremely desirable, given that it is mainly carried out in the autumn and winter months and the machinery is mainly old and fragile.

A related issue is that of on-farm storage of saved seed by small-scale growers, facilities for which are sometimes less than ideal, and this can compromise seed viability, and therefore plant performance.

Impact on thatch production

Growers are reporting that the difficulty they have in finding or constructing suitable storage buildings is significantly limiting their capacity to extend their growing operation, or sometimes even to continue to operate at their existing level. It is also a deterrent to those considering entering the sector.

Contributory factors

- Growers and thatchers who don’t own their own land and buildings are forced to rent and the cost of renting rural storage is rapidly escalating, particularly near large conurbations or major roads. In some parts of the country, growers are charged high rents even for external hard standing for storing machinery.

- The shortage of rural storage space is being created by a combination of extremely high property prices/land value in the countryside and the increasing relaxation of planning restrictions on the residential conversion of farm buildings. Those factors create major disincentives for retaining buildings for agricultural or commercial use, when a much higher value now can be achieved by residential or holiday let use with relatively few planning obstacles.
- In the rental sector, competition for the limited number of buildings available for storage has been increased since the COVID-19 pandemic, due to greater demand for out-of-town storage as distribution centres for online retail businesses and rural office workspace.
- Some local planning authorities consider that the on-farm storage of thatch requires a change of use application since it is counted as a construction material rather than an agricultural product, creating a further obstacle to efficient storage of the material.
- Even for those who are fortunate enough to own their own land, the investment needed to construct suitable new storage buildings is extremely high and out of reach of smaller operators without grant aid since it is not justified by the level of financial return, other than on a very long-term basis.
- Using older buildings comes with certain disadvantages, including difficulty of access for large machinery and challenges in keeping them rodent free.

What measures are already being taken to mitigate this issue?

Grants for new buildings have been obtained by some growers, but don't seem to be consistently available

Smaller growers are often improvising makeshift/temporary storage arrangements e.g. using shipping or lorry containers for storing straw or protecting it with tarpaulins, but these require regular inspection and vermin control. Some thatcher-growers are still building traditional straw ricks as a means of storing their straw crop, but early threshing is needed to reduce the risk of vermin damage.

Growers using storage buildings which are not rodent-proof are having to take regular measures to control rodents which can incur the cost of employing professional pest-control companies.

Possible further measures to address this issue

- Extend DEFRA sources of grant-funding for new barns and provide guidance on availability/criteria for/sources of grant aid to straw growers, reed cutters and thatchers.
- Investigate possible cheaper alternatives for construction of storage buildings.
- Additional grant funding for rural commercial buildings under emerging regional economic development funding streams.
- Raise awareness amongst landowners and other owners of redundant farm or industrial buildings of the need for storage buildings for thatch and machinery and devise a system for putting growers/thatchers/reed cutters in touch with such owners.
- Circulate information about the shortage of storage buildings to conservation officers who may be aware of historic barns which are unsuitable for intensive uses such as residential but are potentially compatible with the storage of thatch materials or machinery.
- Obtain clarification from local planning authorities on the use category into which the storage of thatch falls.
- Promote a collaborative approach to the shared use/construction/conversion of straw processing and storage buildings between different small-scale growers and thatchers, to reduce the onerous extent of investment required from individuals of limited financial means.

Who might be involved?

- National Thatching Straw Growers Association
- DEFRA and other public-sector bodies involved in relevant grant schemes
- Consultants/university research departments knowledgeable about sources of rural enterprise funding
- Local authority conservation officers who are aware of redundant traditional farm buildings
- Landowners

Possible next steps

- Undertake a review of grant schemes funding the construction of agricultural or other rural storage buildings.
- Commission research into the availability and feasibility of using historic farm buildings which are unsuitable for residential conversion – perhaps piloting a specific area where landowners/conservation officers could be contacted directly.

3 Factors affecting production of water reed for thatching

3.1 Weather

Issue

Water reed, by its nature, is adapted to growing in damp conditions. Nevertheless, the impact of climate change still poses some threats to the production of water reed for thatching, which need addressing through management measures if it is to be sustainable in the future as a source of thatch in the UK.

Rising sea levels and higher rainfall events are leaving the East Anglian reed beds increasingly vulnerable to rapidly fluctuating water levels.

The quantity and quality of water in reed beds is critical to the success of the crop. It needs the right amount of water at the right time to both grow and be harvested so water control in reed beds is vital.

Reed cutting mainly takes place between January and early April but cannot be undertaken during rainy weather or when water levels are unduly high. The last two winters have been disastrous for reed cutting in Norfolk because the Broads system has been plagued by constant high-water levels on most sites, which prevent reed harvesting.

The sedge used for ridging is harvested in the summer months when water levels in the Broads are traditionally lower. However, there is also a trend of higher water levels and heavy rainfall events during summer that makes harvesting sedge more unpredictable.

Impact on water reed production

The uncontrolled incursion of water into reed beds (including saline water into freshwater reedbeds) poses a risk to maintaining the required quantity and quality of water in them that is compatible with production of good quality thatching reed.

Flooding of reedbeds in the winter also hinders the use of reed-cutting machinery and can result in the reed being cut shorter than the optimum length required for thatching.

Conversely, a lack of rainfall – particularly in the growing season of spring-summer – can cause levels to drop and water to stagnate, stunting the reed growth. If this occurs for several years, the reed may die. Growth of the reed can also be inhibited by a lack of spring rainfall, making it less suitable for thatching.

Because the conditions compatible with harvesting water reed and sedge are becoming increasingly affected by adverse weather conditions, there is a reduction in both the productivity and commercial viability of Norfolk reed beds.

Contributory Factors

- Influxes of water from tidal surges into freshwater reed beds cause uncontrolled changes in water levels and saline composition. Depending on the severity of influx, this can affect the quality of the reed bed.
- Increased reed bed water levels in winter hinders reed harvesting.

What measures are already being taken to mitigate this issue?

The maintenance and establishment of reed beds is increasingly aligned with evolving research and environmental policy relating to the benefits of wetlands in helping to mitigate the impact of climate change.

The growing appreciation of the environmental benefits of paludiculture (the productive agricultural management of wetlands) is potentially very compatible with the future production of water reed for thatching.

Sluices and dams are utilised on some reed beds to control water levels but are costly to install and require regular maintenance to be effective, so cannot be afforded by all reedbed owners.

Possible further measures to address or mitigate this issue

- Take advantage of climate change policies/funding to maximise opportunities for subsidising the creation of new productive reed beds.
- Introduce measures to protect existing freshwater reed beds from tidal water surges to protect them from uncontrolled influxes of saline water.
- Improve infrastructure to better control fluctuating water levels in productive reed beds.
- Ensure that any new reed beds created are designed with suitable infrastructure to withstand such influxes and to control water levels.
- Investigate better flood alleviation and management measures in the locality of reed beds, such as increased dredging and coastal defences with Environment Agency, local authorities and internal drainage boards.

Who might be involved?

- British Reed Growers Association
- Environment Agency, local authorities and internal drainage boards with a remit for land drainage on wetland areas which contain (or have the potential to develop) productive reedbeds
- Environmental charities with an interest in sustainable land management issues
- Funders of environmental grant schemes e.g. Natural England, DEFRA, Environment Agency etc.

Potential next steps

- Consult with organisations involved with the management of water levels and productive reed beds in the Broads, regarding the potential for measures to protect those reed beds from rising or falling water levels.
- Investigate the ecological and financial implications of introducing water-level controls in other reed beds in order to bring them into use for the production of thatching reed.
- Research the potential for incorporating productive reed beds into future flood alleviation and/or carbon capture measures being planned as climate change mitigation.

3.2 Shortage of reed beds being managed for thatch production

Issue

Although there are approximately 900 reed beds in the UK[2], the management of reed beds for thatch production in England dwindled rapidly during the twentieth century. The majority of surviving commercially managed reedbeds are in Norfolk and Suffolk but by the year 2000 the reed-cutting industry there was under serious threat, with only around a dozen cutters remaining.

Through the efforts of the Broads Authority since 2002, this downward trend in Norfolk and Suffolk has been reversed and the area of commercially productive reed beds doubled to 400 hectares. However, demand for water reed thatch in England far exceeds the indigenous supply.

Whilst there are also known to be reed beds on some private estates which produce water reed for use on their own buildings, their number and extent is not currently known.

Impact on thatch production

The scarcity of commercially managed reed beds in England means that the vast majority of water reed used for thatching in England is imported, mainly from eastern Europe, Turkey, China and Russia. The larger-scale production of water reed in those countries has meant that, until recently, the cost of imported reed could considerably undercut indigenous reed, creating even less incentive for investment in and expansion of production in the UK.

Contributory factors

- Changes in agricultural practices and increasing intensification of land management since the nineteenth century have led to the drainage of many wetland areas to achieve higher productivity.
- Since the mid-twentieth century, reed cutting has declined and the quality of reed beds has been affected by pollution caused by run-off of chemical fertilizers, partly influenced by agricultural subsidies. Together, these factors have caused the number of productive reed beds in England to dramatically drop.

[2] https://www.wildlifetrusts.org/habitats/wetlands/reedbed

- Over the course of the twentieth century, many of the largest remaining reed beds were progressively acquired by nature conservation or environmental trusts. They manage them primarily for their ecological value rather than commercial reed production, and sometimes view the two objectives as being incompatible. That is because there has been a perception that the more regular cutting regime employed for commercial production of water reed adversely affects wildlife habitats.
- Even where such organisations are open to changing their management regimes, the funding required for the equipment needed, and the staff resources and expertise are a barrier to them doing so.
- Not all reedbeds are ideal for commercial production, either because of the quality of the reed or because of practical issues such as deep water or lack of access.
- The availability of skilled reed cutters remains low, and in the year 2000, more than half of them were close to or already beyond retirement age[3]. Whilst an initiative in Norfolk and Suffolk has started to reverse the trend there, the skills are still not widely available, and are concentrated in older generations, partly because it is a precarious way to earn a living due to its seasonal nature (see section 3.3).
- The rapid expansion of global commodity markets since the late twentieth century has put UK producers of water reed at a disadvantage compared to the large-scale commercial growers in eastern Europe and beyond. However, global events of the last two years may start to correct that imbalance and create more favourable trading conditions for UK-sourced materials as reliance on imported material is becoming more costly and less secure as well as increasingly hard to justify on sustainability grounds.

What measures are already being taken to mitigate this issue?

In the early 2000s, reed and sedge cutters set up The North Norfolk Reed Cutters Association (NNRCA) and The Broads Reed and Sedge Cutters Association (BRASCA) in Norfolk and Suffolk. These organisations aim to coordinate efforts to address the decline in reed and sedge production for commercial purposes and expand the creation of new wetland habitats capable of producing thatching materials. As well as managing areas of wetland for thatch production, they also provide mutual support for their members in relation to knowledge and equipment sharing and the submission of grant applications.

[3] https://www.broads-authority.gov.uk/about-the-broads/land-and-water/reed-and-sedge-industry

Their activities extend to liaising with other relevant organisations and the provision of training and advice and they have published guidance on reed cutting[4].

The Broads Authority in Norfolk and Suffolk has been promoting the commercial production of water reed and sedge through grant aid and advice to landowners and support for the local reed cutters since the early 2000s. This has led to a rise in the number of reed and sedge cutters and doubled the area of the Broads managed for commercial reed and sedge production from 200 to 400 hectares.

The British Reed Growers Association (BRGA), founded in 1967, represents the interests of a range of reedbed owners and managers including charities, conservation bodies, private landowners and commercial businesses. It is already working to increase government and environmental sector awareness of the sustainability benefits of increased commercial management of wetlands. It is also lobbying for the targeting of environmental grants to support the more productive management of reedbeds in order to deliver public benefits beyond purely ecological objectives.

The National Society for Master Thatchers Limited has been collaborating with BRASCA and the Broads Authority to develop a quality testing system for water reed as well as helping to produce a training and instruction booklet for reed cutters.

Some wildlife trusts are starting to recognise that the commercial management of reedbeds need not necessarily cause conflict with nature conservation. In 2014 the Royal Society for the Protection of Birds (RSPB) produced a report *Bringing Reedbeds to Life: creating and managing reedbeds for wildlife*[5] which concluded that “commercial reed cutting should not be seen as incompatible with conservation; a correct balance just needs to be achieved and it should be possible to remove up to 30% of a standing reed crop without damage as long as cutting patterns are considered”.

In Scotland, the RSPB has already adapted its reed-bed management in the Tay estuary for the production of thatching reed.

Some rural estates, such as Abbotsbury in Dorset, are managing their own reed beds on a small scale for the production of water reed suitable for thatching their own properties.

[4] http://www.norfolkreed.co.uk/pages/about2.html
[5] https://www.rspb.org.uk/globalassets/downloads/documents/conservation-projects/bringing-reedbeds-back-to-life/bringing-reed-beds-to-life-report.pdf

Possible further measures to address this issue

- Wider access to/awareness of grants available under the DEFRA-funded Local Nature Recovery and Farming in Protected Landscapes schemes (administered by the National Parks and Areas of Outstanding Natural Beauty [AONBs]), which have already assisted in Norfolk and Suffolk with more productive management of reed beds and the acquisition of reed-cutting machinery.
- Grants targeted at mitigating climate change, for example through carbon capture and re-wetting the landscape, could create incentives for the establishment of new reed beds that could be managed for thatching reed production (subject to caveats mentioned in section 3.1 regarding safeguarding against fluctuating water levels).
- Investigate the potential suitability/availability of wetland sites across wider areas of the country for the creation of productive reedbeds.
- Research the extent and location of reed beds not currently in productive use, which might be managed more productively for water reed thatch.
- Target landowners of potential/existing reed beds and pursue discussions regarding their creation/expansion for productive management in a way that would be resilient to climate change and economically viable, with potential funding for trials to establish viability.
- Build on existing RSPB research regarding the establishment of more flexible management systems for reed beds under the control of environmental/wildlife charities in order to extend the number of reed beds under productive management for water reed.
- Provide business development support for owners of non-productive reedbeds (using the model provided by Historic Environment Scotland to RSPB) to put them in touch with reed cutters and thatchers or thatch dealers and encourage them to adopt management measures more compatible with the production of water reed for thatch.
- Promote to landowners the expertise of BRASCA for guidance on managing reed beds for thatching reed production and encourage those who are new to reedbed management to join the BRGA.
- Adopt measures recommended by the Lowland Agricultural Peatland Task Force in their ‘roadmap’ (publication pending in summer 2023) advocating further support for productive reed growing/harvesting.

- Explore the potential for linking the development of reed beds with private finance opportunities available for green infrastructure and nature-based solutions to climate change.
- See also section 3.3 relating to the shortage of skilled reed cutters, in relation to encouraging the wider availability of reed cutters to support an increase in the production of water reed from UK-wide reedbeds.

Who might be involved?

- DEFRA
- Natural England (in its role as regulator/policy advisor)
- Lowland Agricultural Peatland Task Force
- RSPB
- British Reed Growers Association
- Broads Reed and Sedge Cutters Association
- Thatching organisations/associations/societies/individual thatchers
- Country Landowners Association/historic estates
- Landowners of wetland areas containing, or with the potential to create, reedbeds
- Ecological and wildlife trusts
- The National Trust (in their capacity as owners/managers of wetland nature reserves)
- National parks, AONBs and local authorities containing significant wetland areas
- Funding bodies for countryside management and rural development schemes
- Private funders looking to fund nature-based solutions.

Possible next steps

- Commission research into the extent of surviving reedbeds in England that could potentially be put into more productive management and contact the landowners to establish their interest in pursuing such management, given the necessary resources and information.
- Engage with Natural England, RSPB and conservation/wildlife trusts to gauge their willingness to change management systems to be more compatible with commercial reed production for thatching.

- Investigate potential for funding that could provide an incentive for more commercial management of existing reed beds or creation of new ones through funding infrastructure and management.
- In areas where there is potential for commercial exploitation of reed beds, investigate setting up a pilot scheme for training new reed cutters using the BRASCA/Broads Authority scheme in the Broads as a model.

3.3 Shortage of skilled reed cutters

Issue

Due to the relatively limited scale of production of water reed in this country, there has not been the same reliance on a significant foreign workforce that there has been in straw production. However, because reed cutting is skilled but relatively low-paid work and demand is seasonal, numbers within the sector are low. During the 20th and early 21st century it has been an occupation in decline.

Impact on thatch production

The shortage of trained or skilled reed cutters is undoubtedly a limiting factor in the production of water reed in this country, and a potential deterrent for establishing more productive reed beds.

Contributory factors

- The scarcity of productive reed beds is, in itself, a deterrent to the training and employment of more reed cutters, since demand for their skills remains limited to certain parts of the country.
- The low financial return from reed cutting and seasonal nature of the occupation, combined with the bureaucracy of taking on apprentices, is a deterrent to experienced reed cutters taking on apprentices or expanding their teams, as well as to attracting new recruits into the field.
- Competition from foreign imports of reed has affected the financial viability of reed cutting as a profession since prices for locally produced reed have barely risen for the last 15 years[6].
- The cost of housing in rural areas (which had already been high for years, but which has increased significantly since the start of the COVID-19 pandemic) means that some people who might potentially be willing and able to do reed-cutting work cannot afford to live in the areas where the work is to be found or to travel to it from further afield.

What measures are already being taken to mitigate this issue?

In 2002 the Broads Authority commissioned a report into the future of the reed-cutting industry in Norfolk and that led to strategies being implemented to try to reverse its decline on the Broads and led to an increase in numbers of new entrants to the profession.

In 2003 and 2004 the two industry-based organisations – the Broads Reed and Sedge Cutters Association (BRASCA) and the North Norfolk Reed Cutters Association – were set

[6] North Norfolk Reed Cutters Association website

up to raise the profile of the reed-cutting sector in Norfolk, coordinate efforts to revive it and take a more unified approach in lobbying and collaborating with public organisations which could provide support and funding to make it more sustainable.

In 2006 a bursary scheme for training reed cutters was established by the Broads Authority with grant aid from the Heritage Lottery Fund and working in partnership with experienced reed cutters in Norfolk.

Using the Action Plan for the Reed and Sedge Cutting Industry published by the Broads Authority in 2012, there has been further positive support for local reed cutters from the Broads Authority. This has included ring fencing contracts for conservation work on its operational sites to the reed cutters and offering a series of *Farming in Protected Landscapes* (FiPL) grants to several cutters in 2021 and 2022.

Possible further measures to address this issue

- Create opportunities for reed cutters by incentivising the creation of new productive reed beds and adoption of revised management regimes in existing reed beds currently managed for nature/wildlife conservation to stimulate demand for reed cutters (see measures recommended in section 2.3 which would create greater demand for reed cutters).
- Create bursaries for training new reed cutters beyond Norfolk and Suffolk.
- Create recognised apprenticeship opportunities for reed cutters to extend those skills more widely and provide financial incentives for people to pursue the craft in a way that is integrated with other skills to provide year-round employment.
- Increase demand for reed-cutting skills elsewhere in the country on reed beds managed by nature/wildlife conservation organisations.
- Investigate with nature conservation trusts who look after reed beds the feasibility of integrating reed-cutting skills within the roles of existing warden/conservation staff.

Who might be involved?

- Thatching organisations/associations/societies/individual thatchers
- Agricultural and land-based skill colleges
- RSPB
- Natural England, wildlife trusts and the National Trust (in their capacity as owners/managers of wetland nature reserves)
- Broads Reed and Sedge Cutters Association

- The Broads Authority and other National parks or local authorities containing significant wetland areas
- Funding bodies for countryside management and rural development schemes
- See section 3.4 in relation to the machinery issue and potential for greater mechanisation of the process.

Possible next steps

- Investigate funding of bursaries/apprenticeships for training of reed cutters either nationally or regionally using the model trialled by The Broads Authority/BRASCA.
- Contact organisations managing reed beds across the country to establish whether there could be a higher demand nationally for skilled reed cutters.

3.4 Cost of new machinery

Issue

For reed cutting, more modern equipment is available to purchase than is generally the case for straw. However, the problem is more one of its unaffordability for the individuals pursuing this occupation, meaning that they often have to manage with older or more inefficient machinery.

Impact on thatch production

The widespread reliance on using old or inefficient machinery in reed cutting has a similar impact on productivity. However, the trend is rather different than for straw production due to positive reports of new machinery recently being acquired by several reed cutters. This may in time lead to improved efficiency in harvesting but since that acquisition of machinery has relied on public grants, it can't be relied upon to continue.

Contributory factors

- Due to the low wages and the intermittent nature of reed cutters' work, modern machinery is either unaffordable or the level of investment required in it cannot be commercially justified unless the expense is subsidised.

What measures are already being taken to mitigate this issue?

Recent collaboration between reed-cutting organisations in Norfolk and Suffolk and the Broads Authority and Suffolk Coast AONB has led to the allocation of grants to subsidise reed cutting. Generous grants for the purchase of new reed-cutting machinery for a number of individual reed cutters have been made available through the DEFRA-funded *Farming in Protected Landscapes* (FiPL) scheme (run by the Broads Authority which also provides support and prioritisation through the Broads Plan), as well as support provided to them in making those grant applications.

Possible further measures to address this issue

- Continued provision of financial incentives/assistance to reed cutters in Norfolk and investigate the scope for the FiPL grant schemes to be used for a similar purpose in areas where other reed cutters might operate.
- Lobby for the continuation of the DEFRA Adding Value Farming Investment Fund in order that reed cutters can benefit from the potential funding for investment in machinery.

Who might be involved?

- DEFRA
- Public funding bodies administrating FiPL grant schemes in areas relevant to reed cutting
- Individual water reed producers
- Broads Reed and Sedge Cutters Association and individual reed cutters
- British Reed Growers Association/environmental and nature conservation trusts which are using/might wish to use reed-cutting equipment.

Possible next steps

- Investigate the potential sources for grant funding for new reed-cutting machinery.
- Collate information available on the suitability and efficiency of machinery currently being used by commercial reed cutters in the UK and abroad, and identify which are the most efficient/provide best value for money.
- Disseminate information on the availability of grant aid for purchasing machinery to reed cutters and other organisations managing reed beds outside the Broads areas.

3.5 Shortage of storage buildings for materials and machinery

Issue

Once cut, water reed, like straw, needs to be dressed, dried and securely stored to maintain it in the best condition for use on roofs. Reed cutters face similar issues to straw growers with the shortage of affordable and conveniently located storage buildings/workshops for reed and machinery.

Impact on thatch production

Shortage of storage buildings is one of the deterrents to the expansion of the productive use of reed beds in Norfolk and a limitation on the activities of existing reed cutters. It may prove to be a constraint in the development of such reed beds, or the expansion of the reed-cutting profession, elsewhere in the country.

Contributory factors

- Similar factors to those affecting straw production (see section 2.5) apply in terms of the economics of providing or renting buildings.
- Planning controls in the sensitive landscapes where reed beds occur can also be a constraint on construction of new buildings.

What measures are already being taken to mitigate this issue?

Some reedbed owners have secured funding for new buildings as part of wider grant aid packages. In other areas, reed cutters are collaborating on renting storage buildings.

Possible further measures to address this issue

- Investigate possible cheaper alternatives for construction of storage buildings.
- Additional grant funding for rural commercial buildings under emerging regional economic development funding streams.
- Raise awareness amongst landowners and other owners of redundant farm or industrial buildings of the need for thatch and machinery storage buildings, and devise a system for putting growers/thatchers/reed cutters in touch with such owners.
- Encourage any future schemes for the creation of new reed beds to also incorporate suitable and conveniently located storage buildings.

- Promote a collaborative approach to the shared use/construction/conversion of storage buildings between reed growers or reed-cutting organisations, to reduce the onerous extent of investment required from individuals of limited financial means.

Who might be involved?

- RSPB/National Trust/Country Landowners Association and other reed-bed owners
- British Reed Growers Association
- Broads Reed and Sedge Cutters Association/individual reed cutters
- DEFRA and other public-sector bodies involved in relevant environmental or rural enterprise grant schemes
- Consultants/university research departments knowledgeable about sources of rural enterprise funding
- Landowners.

Possible next steps

- Identify areas where the shortage of storage buildings is most acute and make a targeted approach to landowners in that area who are likely to own suitable buildings and be sympathetic to supporting the reed-cutting industry.
- Undertake a review of grant schemes funding the construction of agricultural or other rural storage buildings which might be relevant to reed bed owners and reed cutters.

4 Conclusions

This report captures a snapshot of the main issues facing growers and producers of traditional thatching materials in England. It is clear that ongoing sustainable production of good quality straw and water reed is by no means assured. Some issues, such as weather, labour, cost and availability of machinery and escalating rural land values, affect supply of both materials. For straw, there is increasing dependence on a few large-scale growers as the number of smaller producers (who are less resilient in the face of adverse economic factors such as escalating rural land values and shortage of labour) is dwindling. Several contributors to the report were also concerned about the ageing demographic of current straw growers and the impending loss of knowledge and experience to the sector as they approach retirement. Training and mentoring are also problems for reed cutters. Lack of access to land combined with current policy and funding that favour nature conservation over commercial reed production are additional issues that discourage new reed cutters into the sector.

On the positive side, this report demonstrates that there is clearly a will to see production of these materials continue and that individual straw growers (both large- and small-scale) and reed cutters are already taking steps to address some of the issues. However, broader collective action will be needed to bring about changes to current policy and funding so as to achieve more ‘joined-up’ objectives for nature conservation, landscape conservation, climate change, agrobiodiversity, building conservation, rural skills and employment, and levelling up.

There will be a limit to the changes that Historic England can make alone, but we can identify and draw together potential partners for future collaboration and facilitate, support and (to some extent) fund actions by other stakeholders. We have already hosted a meeting with reed-cutting stakeholders in Norfolk in March 2023 and plan a similar event for straw growers later in 2023. We hope that bringing stakeholders together will encourage sharing of ideas and best practice and enable the sector itself to identify solutions and agree priorities and next steps. By working with others, we can make best use of our limited resources.

There are some steps identified in the report, however, that Historic England is well-placed to take, and we will progress these in due course. In fact, we have already made a start on some of them, such as commissioning research jointly with Historic Environment Scotland into machinery for straw harvesting and processing, and identifying reed beds that could potentially produce thatching reed.

Historic England has an ongoing commitment to securing a future for traditional thatch.

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