Heritage Crafts Association

The Radcliffe Red List of Endangered Crafts

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Text by Greta Bertram, Daniel Carpenter, Ian Keys, Patricia Lovett MBE, and Robin Wood MBE.

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About the HCA

From blacksmithing to basketry, from weaving to wood-turning, we have an incredible range of craft skills in the UK and some of the best craftspeople in the world.

Founded eight years ago by a small group of makers and those interested in craft, the Heritage Crafts Association (HCA) is the only national organisation that safeguards and promotes traditional craft skills in the UK. We have brought the sector together for the first time and created a focus for heritage crafts.

Our aim is to support and promote heritage crafts as a fundamental part of our living heritage. We do this by:

- **Surveying** – researching the status of heritage crafts, identifying those crafts in decline or in imminent danger of being lost, and addressing the issues to ensure their survival.

- **Advocating** – communicating the vital importance of heritage crafts to government, key agencies and organisations.

- **Celebrating** – raising awareness and raising the status of heritage craft skills with the wider public through a programme of public relations, communications and showcase events.

- **Safeguarding** – working in partnership with key agencies in the education and learning sectors to identify and support new and innovative ways to ensure that the highest standard of heritage skills are passed from one generation to the next and where necessary recorded for posterity.

- **Supporting** – supporting heritage crafts through a range of means, including advice, networking, training and access to public and private funding.

Unlike contemporary crafts, which are supported by the government though Arts Council England, heritage crafts receive no public funding. Today, the Heritage Crafts Association is still run by a dedicated team of volunteer Trustees, assisted by a part-time Administrator kindly funded by the Headley Trust.

To achieve our aims, the HCA needs the support of everyone concerned about the future of craft – craftspeople, craft guilds and associations, craft business, Livery Companies, galleries, and those passionate about preserving craft, heritage and tradition for future generations.

Please join the HCA, support us, and enable us to continue this very important work. Without your support, many of the crafts highlighted in this publication could be extinct within the next five years.

www.heritagecrafts.org.uk
Traditional crafts are as much a part of our shared heritage as our wonderful historic landscapes, beautiful buildings, rare breeds of native farm animals and varied museum collections. This heritage is emphasized by our many craft surnames such as Barker, Potter, Weaver, Turner, Arkwright and, of course, Smith. However, whilst we are fortunate to have the Millennium Seed Bank, the Statutory List of Buildings of Special Architectural or Historic Interest and the I.U.C.N. Red List of Threatened Species, we are yet to catalogue the most endangered instances of our craft heritage.

As President of the Heritage Crafts Association, I could not, therefore, be more delighted to see that this is now being addressed. The Association, with the support of the Radcliffe Trust, has created the Radcliffe Red List of Endangered Crafts – a vital piece of research and the first of its kind in the U.K. This research has created an extensive, although not exhaustive, list of heritage crafts in the U.K., assessing the current state of each and identifying those which are most at risk of disappearing. With four crafts known to have become extinct in the past ten years, I urgently believe that we must gather more information on the crafts identified so far to ensure that no more treasured skills are lost forever.

I very much hope that the Red List will encourage more interest and further research into this prized aspect of our heritage, expanding our knowledge and shared appreciation of traditional craftsmanship. And, of course, placing these crafts on a sustainable footing so that they can continue to bring genuine economic and cultural benefits to our communities for generations to come.
The Radcliffe Red List

Traditional craft knowledge, skills and practices are as equally an important part of our heritage in the UK as the tangible artefacts, monuments and buildings that are preserved in our museums and historic environments. To be properly safeguarded for the future, heritage crafts must be lived – they must be passed on from master to student, evolving through the generations to remain viable and vibrant in each new age.

As the organisation set up by craftspeople concerned about the precariousness of traditional crafts, it is the HCA’s responsibility to go beyond the stories and anecdotal accounts to find a more systematic way to assess exactly what is at greatest risk of being lost.

In 2015, with generous funding from The Radcliffe Trust, the HCA set about a new research project to produce The Radcliffe Red List of Endangered Crafts, the aim of which was to assess the current viability of traditional heritage crafts in the UK and identify those crafts which are most at risk of disappearing.

For the purposes of this research, a heritage craft is defined as a practice which employs manual dexterity and skill and an understanding of traditional materials, design and techniques, and which has been practised for two or more successive generations. This research focuses on craft practices which are taking place in the UK at the present time, including those crafts which have originated elsewhere, and on those aspects of each craft with a high reliance on hand-work and which involve high levels of hand skill.

Between May 2016 and January 2017, approximately 700 organisations and individuals were contacted directly by email and telephone and invited to contribute to the research. Participants were asked to provide background information about each craft, such as its history, techniques and local forms, as well as current information relating to the number of skilled craftspeople and trainees, how endangered
they believed the craft to be as a whole, any particularly endangered skills within the craft, and any issues affecting the viability of the craft.

Each craft was then classified into one of four categories of endangerment using a combination of both objective criteria (such as numbers of trainees and skilled craftspeople) and subjective criteria (consensus on how endangered practitioners believe their craft to be, combined with other factors such as the average age of practitioners, training opportunities available, and issues affecting the future viability of the craft).

Of the 169 crafts featured in the research, seventeen have been classified as ‘critically endangered’ (at serious risk of no longer being practised). These include crafts with a shrinking base of craftspeople, limited training opportunities, low financial viability, or no mechanism to pass on the skills and knowledge. Four have been classified as ‘extinct’ (no longer practised) in the past generation.

Issues affecting the viability of heritage crafts have been identified. Some of these were already known to the HCA, but the research has significantly expanded our knowledge of them, the reasons behind them, and the experiences of individual craftspeople. We now have a much better understanding of the shape of the heritage crafts sector, which crafts are most endangered, and the issues affecting their future viability.

It is our hope that this research will act as a call to action to those who have it within their power to resolve or alleviate these issues, and that this project will mark the start of long-term monitoring of heritage craft viability and a shared will to avoid the cultural loss that is borne each time a craft dies.

Greta Bertram, Project Manager, May 2017
The research has identified a range of issues which affect the future viability of crafts across the spectrum, and not just those that have been identified as critically endangered.

**Training:** A lack of formal and informal training opportunities; the quality of available training; a lack of standards, qualifications and accreditation in training; the prohibitive cost of training for the trainer and other barriers for those looking to take on trainees.

**Recruitment:** Difficulties in the recruitment of trainees and new entrants to the crafts.

**Ageing skilled practitioners:** Few or no younger people entering the crafts – in some crafts the youngest known craftsperson may be in their 50s or 60s.

**Loss of high-level craft skills:** This may be due to a changing focus within the way the craft is practised, teaching methods, or the introduction of new technologies within the wider craft.

**Market:** Reduced demand for the product; lack of awareness from potential customers about the craft; (un)willingness of customers to pay higher prices for hand-made, British products; competition from overseas; difficulties of earning a living from the craft alone.

**Supply of raw materials, allied materials and tools:** The availability and (rising) cost of raw materials, allied materials and tools. Certain crafts rely on very specific materials and tools, so if anything happens to that supply then the future of the craft may be severely affected.

**Small business challenges:** Perceived increasing bureaucratic burden for small businesses; business rates and the cost of affordable workshops; the need for business skills as well as craft skills; the challenges of passing on a craft business.

**Miscellaneous:** Restrictive legislation; changing methods of working; funding cuts to allied industries; lack of data about individual crafts.

For full definitions and further information about each craft, please visit:
http://redlist.heritagecrafts.org.uk
Following the research and the compilation of The Radcliffe Red List of Endangered Crafts, the HCA makes the following recommendations.

**Government responsibility for heritage crafts:** It is recommended that the Government clarifies the role of the Department for Culture, Media and Sport in supporting heritage crafts and other areas of intangible heritage, and makes changes as necessary to ensure that they are supported through this department and its agencies. Heritage crafts currently fall in the gap between the Government agencies for arts and heritage, which focus respectively on contemporary crafts and tangible heritage.

**Ratification of the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage:** At the time of writing, 172 of 194 countries have ratified the Convention, but not the UK. Ratification of the Convention would recognise the breadth of the cultural heritage in the UK, and ensure that traditional craftsmanship, as well as other forms of intangible cultural heritage, are safeguarded for the future.

**Action to address the issues affecting the viability of heritage crafts:** While the specific measures needed will vary according to the individual craft, action must be taken to address the broader issues affecting the future viability of the sector, particularly relating to training, recruitment, an ageing skilled workforce and market challenges. This would protect and promote our craft heritage and help businesses and communities to grow.

**Action to downgrade critically endangered crafts:** It is recommended that further research is conducted into the critically endangered crafts to understand further the issues affecting them and to identify the specific requirements of each. Actions must then be taken to remove them from the critically endangered list. This will require different actions for each craft.

**Monitoring and review of The Radcliffe Red List of Endangered Crafts:** It is recommended that the Red List is monitored and a thorough review conducted every three to five years by repeating the research, and that funding be made available to do this.
Extinct Crafts

Extinct Crafts are those which are no longer practised. The HCA knows of four crafts which have become extinct in the UK in the last generation. There may be others, and we would like to hear about them. The reasons for their loss are varied: skilled master craftspeople dying young, the flooding of the market with cheap products from abroad, and a lack of demand being some.

These are the crafts that the HCA knows to have been lost:

- Cricket ball making
- Gold beating
- Lacrosse stick making
- Sieve and riddle making

Left: Mike Turnock, shown here, passed on his hand-made sieve and riddle making skills but sadly the viable business later closed. There is still a demand for UK-made sieves and riddles. Photo: Robin Wood MBE

Right: Gold beating at Habberley Meadows in Birmingham. Photo: Jan Pickett
Critically Endangered Crafts

Critically Endangered Crafts are those at serious risk of no longer being practised. They may include crafts with a shrinking base of craftspeople, crafts with limited training opportunities, crafts with low financial viability, or crafts where there is no mechanism to pass on the skills and knowledge. There are seventeen crafts that the HCA considers to be critically endangered.

Clay pipe making  
Clog making (hand-carved soles)  
Coachbuilding and wagon making  
Collar making  
Devon stave basket making  
Fan making  
Fore-edge painting  
Hat block making  
Metal thread making

Paper marbling  
Parchment and vellum making  
Piano making  
Plane making  
Saw making  
Spade making (forged heads)  
Swill basket making  
Tanning with oak bark
Endangered Crafts

Endangered Crafts are those which currently have sufficient craftspeople to transmit the craft skills to the next generation, but for which there are serious concerns about their ongoing viability. They may include crafts with a shrinking market share, an ageing skilled workforce, or crafts with a declining number of practitioners.

Arrowsmithing
Bell founding
Bicycle making
Bowl turning
Braiding
Brass instrument making
Brick making
Broom making
Brush making
Chair caning
Chair seating
Clock and watch making
Coopering (beer)
Coppersmithing (objects)
Cricket bat making
Engine turning (guilloché)
Flintknapping (masonry)
Folding knife making
Gilding
Glassworking (scientific glassware)
Globe making
Hand grinding
Harp making
Horn working
Hurdle making (gate hurdles)
Hurdle making (wattle hurdles)
Illumination
Japanning
Ladder making
Leadworking
Letter cutting
Oar, mast, spar and flagpole making
Pargeting
Passementerie
Percussion instrument making
Rake making
Sail making
Scissor making
Slating
Split cane rod making
Sussex trug making
Tile making (wall and floor tiles)
Wallpaper making
Woodwind instrument making (flutes)
Woodwind instrument making (reed instruments)
Currently Viable Crafts are those which are in a healthy state and have sufficient craftspeople to transmit the craft skills to the next generation. They may include crafts with a large market share, widely popular crafts, or crafts with a strong local presence. However, these crafts are not risk-free nor without issues affecting their future viability.

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<td>Farriery</td>
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**Data Deficient:** There are eight crafts for which the HCA had insufficient data to make a classification: Carpet and rug tufting, Corn dolly making, Cutlery making (table cutlery), Lorinery, Shoe last making, Straw craft, Swordsmithing, and Tatting.
Clay pipe making

The making of tobacco pipes from clay, historically by press moulding but more recently also by slip casting.

Tobacco was first brought to Europe during the Tudor period, and was smoked in a clay pipe. Clay pipe making in England began in the latter half of the sixteenth century, probably in London, and spread across the country, especially in areas with access to good white clay. Throughout the following 250 years, almost every city and town, and many villages, had a clay pipe maker.

In the second half of the nineteenth century the larger, more prosperous factories took most of the business, and the industry became concentrated in cities and towns, and the cottage industry died out. London, Bristol, Manchester, Broseley in Shropshire, Stockton-on-Tees, and Glasgow were centres of pipe making.

The twentieth century saw a rise in the popularity of cigarettes, and then a decline in smoking altogether due to the well-publicised health risks. Today, the main market for clay pipes is smoking aficionados, collectors, re-enactments, and film and TV.

Clay pipes are pressed in moulds. The bore is created by pushing an oiled wire inside the stem, and the bowl is formed by inserting a stopper. The excess clay is trimmed off and the pipe left to dry before the final trimming and firing in a kiln. This press method is usually seen as the most traditional, but from the mid-nineteenth century the use of slip-casting with liquid clay was also established.

Today there are three craftspeople making clay pipes in the UK: Heather Coleman in Devon, Rex Key in Shropshire, and David Higgins.

The making of clogs with hand-carved wooden soles and leather uppers.

The origins of the British clog are unknown, but they were widespread by the mid-nineteenth century. Unlike the French sabot or Dutch clog, they were never completely wooden; instead they had a leather upper nailed to a hand-carved wooden sole. This made them comfortable, hard wearing, and very durable, and they were often worn in heavy industry. Clogs performed better in water and heat than conventional leather-soled footwear.

While clogs are still worn today by some factory workers due to their durability and comfort, the main market is for bespoke and orthopaedic clogs. There is also a demand for clogs worn in clog dancing, although these are more commonly made with machine-cut soles.

Traditional British clogs have a hand-carved wooden sole which is shaped to fit the individual; it is made using three pivot knives approximately 3-feet long. The leather is hand-cut, shaped and fixed to the soles. Producing hand-carved soles is the most skilled and most endangered aspect of clog making.

There are currently two skilled clog makers in the UK who hand-carve soles, Jeremy Atkinson in Herefordshire and Geraint Parfitt in Cardiff, and one apprentice, JoJo Wood. There is also one clog factory and around a dozen clog makers making clogs with machine-cut soles.

Further information: https://www.clogmaker.co.uk and www.clogs.co.uk
Coachbuilding and wagon making

The making of horse-drawn vehicles such as coaches and carriages (‘coachbuilding’) or wagons (‘wagon making’ or ‘wainwrighting’).

Four-wheeled, horse-drawn vehicles such as travelling coaches and baggage wagons were well-known in Britain in mediæval times. The four-wheeled farm wagon, as opposed to the two-wheeled cart, developed in the sixteenth century and each area of the country soon came to develop its own regional design. By the 1920s the manufacture of new wagons had largely ceased, although many were still in use.

The traditional progression within the craft was from wheelwright to wainwright to coachbuilder. The work of a wainwright was not as fine as that of a coachbuilder, with fewer trimmings and ornamentation.

Today, there is a small market for horse-drawn vehicles. The demand for coaches is mostly for weddings and private collections, alongside repairs to existing coaches. The demand for new horse-drawn wagons has all but disappeared, and the repair market is almost non-existent as the eventual value is typically less than the cost of repair. The small demand for new vehicles is largely met by imports from eastern Europe as their price is often only a fraction of the UK cost.

There are two businesses in the UK making coaches and wagons: Crofords Coachbuilders in Kent and Mike Rowland & Son in Devon.

Further information: www.wheelwright.org.uk and www.croford-coachbuilders.co.uk
Collar making

The making of collars for horses, traditionally with a leather outer and rye straw filling.

Historically there were three separate trades – saddlery, collar making and harness making – and these craftspeople could be found in every town and village throughout the country. Today collar making, for both heavy horses and driving collars, and harness making are typically done together. The collar is the most important part of the harness and must be the correct size and shape for each horse; the skill lies in making the best fit.

In the late-nineteenth century there were approximately 3·3 million working horses and collar making and the other horse-related trades thrived. However, by 1900 the number of horses had fallen to 1 million, and by 20–25,000 by 1914. As the number of horses decreased, the demand for the horse-related trades disappeared and the crafts fell into rapid decline.

Today, the market for driving collars, mainly for leisure use, is much bigger than that for heavy horse collars, which were previously used in industry. England and mainland Europe provide the principal markets for hand-made collars.

Traditional horse collars consisted of a rye straw filling with a leather outer but today many collars are made using synthetic materials rather than straw, and the related traditional skills are especially endangered. Much of the present demand is met from abroad, especially the USA, where production is automated and the cost is a fraction of that for collars made in the UK.

There are currently four skilled craftspeople in the UK making collars: John McDonald and Kate Hetherington in Somerset; Terry Davies in Shropshire, and J. C. Huskisson & Son Harness Co. in the West Midlands.

Further information: www.katehetheringtoncollarandharness.co.uk and http://traditionalcraftsblog.blogspot.co.uk/2013/09

Kate Hetherington, Collar and harness maker.
Devon stave basket making

The making of Devon stave baskets (also known as ‘maunds’), an assembled basket made of wooden splints fixed to a wooden base.

The Devon stave is a strong basket made of wooden splints attached to a wooden base. This type of basket was traditionally used in the fields, to take feed to cattle and to collect vegetables and hard fruit after harvesting. It came in five standard sizes, the largest of which is known as a ‘maund’.

The base was traditionally made of elm, but since the arrival of Dutch elm disease has been made from other woods. The basket is held together by nails and ash bands or bonds. In the smaller sizes an ash band forms the handles; in the larger sizes the two end staves form the handles. The bands are cleft from long straight green ash poles, then shaved to a wedge. This is bent to shape on special formers and then left to dry. Each size of stave basket has its own former: one for the top band and one for the handle in the smaller sizes, and one for the top band only in the larger sizes.

The last person to make Devon stave baskets in any quantity, Jack Rowsell, died in 1997. He learned the craft from his father and made about 25–50 a year in his spare time.

Today there are no full-time makers of the Devon stave basket in the UK and it could be considered almost extinct. However, the Museum of English Rural Life at the University of Reading holds detailed information on how to make the baskets, and has a set of slides showing the construction process. There are two people who know how to make the baskets and teach occasional courses: Hilary Burns in Devon, and Mark Snellgrove in Cornwall.

Further information: http://www.basketryandbeyond.org.uk/maunds-pannier-markets-north-devon/
The making of fans, traditionally with wooden sticks (montures) and painted paper leaves.

Fans are believed to date from around 3000 BC and were found in both Europe and the Far East. The earliest fans were fixed, rather than folding, and it is believed that the latter developed in Japan and spread west to China. The first European folding fans were inspired by those brought back from the Far East and were reserved for royalty and the nobility.

By the start of the eighteenth century folding fans were made throughout Europe and also imported from the Far East. At this time, the printed fan was also developed. In the nineteenth century, brisé – carved or pierced – fans and printed fans dominated the cheaper end of the market, while the high-end market was dominated by extremely lavish fans. The early twentieth-century saw the rise of advertising fans and feather fans. Today, commemorative fans are still produced for special occasions.

A fan consists of two parts: the montures – sticks and guards – and the leaf – the paper. Early montures were made from luxury materials such as ivory, mother of pearl and tortoiseshell, and were highly decorated, either with ornamental carving or with silver, gold and precious stones. The leaves were often painted by skilled artists; this was considered a separate craft.

Today there is one skilled fan maker in the UK, Caroline Allington, one trainee, Victoria Ajoku, and one fan conservator.

Further information: www.thefanmuseum.org.uk and www.fanmakers.com
Fore-edge painting

The application of an image to the edges of the pages of a book.

Fore-edge painting is the craft of applying an image to the edge of a book. The page block is fanned and an image is painted on the stepped surface. If the page edges are gilded or marbled, the applied image disappears when the book is relaxed; when re-fanned, the painting reappears.

Early English fore-edge paintings are believed to date to the fourteenth century, and depicted heraldic designs in gold and other colours. The first known example of a disappearing fore-edge painting dates from 1649. Around 1750, the subject matter of fore-edge paintings changed from simple decorative or heraldic designs to landscapes, portraits and religious scenes, usually painted in full colour. Today, fore-edge painting covers a much wider variety of topics.

The fortunes of fore-edge painting have fluctuated over the centuries. The craft underwent a renaissance in the second half of the eighteenth century and another in the late-twentieth century.

Due to the intrinsic secrecy of fore-edge painting, it is a craft that has historically languished in obscurity and very few people have even heard of it. Today there are three fore-edge painters known to the HCA in the UK: Margaret Allport Costa, Clare Brooksbank, and Martin Frost in West Sussex.

Further information: www.foredgefrost.co.uk
Hat block making

The making of the blocks, either in wood or metal, on which hats are made.

Hat block making creates the blocks, either in wood or metal, on which hats are shaped and stiffened.

Before 1800, blocks were turned on a lathe and were round in shape. At this time, hats were worn on top of wigs and did not need to fit the shape of the wearer’s head. However, as wigs fell out of fashion the shape of the block became more important and they began to be carved by hand to a more oval shape.

Each hat block is created to form a particular style and size. Some hats require a block for the brim and a second block for the crown. Other blocks are divided into sections, commonly five. This allows the different pieces to be taken apart and then reassembled in various ways to create different effects, and allows the block to be removed without deforming the hat.

Soft woods are usually used for hat blocks and aluminium is sometimes substituted for wood.

Today, the hat market is flooded with cheap imports from China, making it hard for UK hat manufacturers to compete and leading to a decline in the demand for hat blocks.

There are two businesses currently making hat blocks in the UK: Boon & Lane Ltd. in Bedfordshire, and Guy Morse Brown in Wiltshire.

Further information: www.hatblockstore.co.uk and www.hatblocks.co.uk
Metal thread making

The making of metal threads for embroidery.

Metal threads are used for goldwork, an embroidery technique which uses a variety of metal threads and not just those of gold. Goldwork was originally developed in Asia over 2,000 years ago and spread to Europe. In the Middle Ages, a highly-skilled style of embroidery known as ‘Opus Anglicanum’ developed in England which used metal threads on rich velvet or linen backgrounds, particularly for church vestments and hangings.

Today metal threads are commonly used in historical costumes, theatre costumes and for insignia. The Royal School of Needlework’s training in goldwork embroidery also provides a big market.

Metal threads are made using round or flattened wire, usually gold, silver or copper, sometimes with a core of another material. In order to create different textures, metal threads are made in different ways, each with variations. These include ‘purl’, where round or flattened wire is formed into a tightly coiled spring, and ‘twist’, where three threads are twisted together.

There are two businesses currently making metal embroidery threads in the UK: Benton & Johnson, and Golden Threads in East Sussex.

Further information:
https://www.thetoyeshop.com/benton-johnson.html and http://www.goldenthreads.co.uk/
The application of an aqueous surface design on to paper, which can produce patterns similar to smooth marble or other kinds of stone. In this case, paper marbling refers to the making of extremely complex repeatable patterns which require very high levels of skill.

The process of paper marbling was first developed in China and Japan, before spreading to Turkey and reaching Europe in the seventeenth century. In Europe, marbled paper was used for book covers and endpapers. The patterned paper ensured that slight damage due to constant or rough handling was less obvious than if the cover had been plain. Each sheet of paper produced by marbling is unique and workshops developed a number of different patterns. Marbling became popular as a handicraft in the nineteenth century after the publication of the ‘The Art of Marbling’ by Charles Woolnough in 1853.

The tools and materials used for paper marbling are relatively simple. A watertight tray is filled with a viscous substance that will hold the ink on the surface, such as the gel produced by Irish carrageen moss. One or more colours of paint are dropped on to the surface and allowed to spread for a random pattern, or combed or twirled to produce more controlled patterns. Paper, usually treated with alum, is gently laid on the surface and the pattern on the gel transfers to the paper. The paper is then carefully lifted and washed to remove excess colour.

The HCA knows of two paper marblers practising to this high level in the UK: Victoria Hall in Norfolk and Lucy McGrath in London.

Further information: http://www.marbling.org
The making of material used for writing, drawing, drumskins, book binding etc, from processed animal skin. Vellum refers specifically to calfskin, and parchment is sheep and goatskin.

Parchment and vellum have been used for manuscripts and books for thousands of years. As a writing surface, vellum, when properly prepared, surpasses any paper and lasts far longer. The Codex Sinaiticus is a fourth-century vellum bible, the pages of which are still flexible and can be turned easily.

The skins are a by-product of the meat and dairy industry. They are soaked in vats of lime water and the hair is gently eased out of the skin using a two-handled knife called a scudder. The skins are then stretched out and scraped to raise the grain and create as even a surface as possible. Once dry, the skins are cut from the frames and rolled ready for use.

Today there is only one manufacturer of parchment and vellum in the UK: William Cowley in Buckinghamshire, where there are two masters and one apprentice.

The making of pianos.

The piano was invented around 1700 and by the end of the eighteenth century had replaced the harpsichord as the predominant keyboard instrument. Over the next century the design of the piano changed significantly, with the development of high quality piano wire for the strings, the introduction of an iron frame to support the strings, and new methods of stringing. The design of the piano has remained relatively unchanged since the late 1800s, although manufacturers may use different materials or techniques within the manufacturing process.

Pianos have been built in Britain for over 200 years. At the start of the twentieth century there were 360 makers, but the last firm ceased UK manufacture in 2009. However, the craft was revived in 2012 by Cavendish Pianos in North Yorkshire.

Building pianos by hand is a highly-skilled craft which requires years of specialised training and includes the skills of cabinet making, string making, piano action building, and tuning. Each piano is built over several weeks, and has its own unique personal characteristics.

Today there is only one manufacturer of pianos in the UK: Cavendish Pianos in North Yorkshire.

Further information: http://www.cavendishpianos.com
Plane making

The making of hand planes for woodworking.

The earliest known woodworking planes date from the Roman era. Until the mid-seventeenth century, planes were made by the craftsmen who used them, but by the end of the century plane making had emerged as a separate craft. The number of plane makers in Britain peaked at about 180 in 1855, following which the craft fell into rapid decline due to the introduction of machinery to perform tasks for which planes had previously been used, and to the reorganisation of the trade.

Woodworking planes consist of a steel blade held in a body of cast metal or wood. In an infill plane, the body is made of both metal and wood. There are numerous designs of planes, each intended to perform a particular task, and many crafts and trades have their own very specific styles of planes.

Today there are just a few makers of each type of plane in the UK: Phil Edwards in Dorset makes traditional eighteenth-century wooden-bodied woodworking hand planes, using beech and Sheffield high carbon steel. Oliver Sparks in Leicestershire makes a small number of exquisite wood and infill planes. Thomas Flinn & Co. in Sheffield are the only manufacturer of cast iron planes, producing the Clifton range of planes.

Further information: http://www.philly-planes.co.uk/ and http://www.oliversparks.co.uk/ and http://www.flinn-garlick-saws.co.uk/
The making of hand saws for cutting wood and other materials, with metal blades and wooden handles.

The earliest known metal saws date from 2500 BC and were used by carpenters and stone masons in the Middle East. These saws cut on the pull stroke. The Romans began to set the saw teeth — splaying them slightly so they create a little clearance in the cut — enabling the saws to cut on the more powerful push stroke. Improvements in the quality of steel in the early-seventeenth century dispensed with the cumbersome wooden frames necessary to hold the blade under tension, and saw making in its current form dates from the production of rolled steel plate during the Industrial Revolution.

There are various skilled processes involved in saw making, including grinding, cutting the teeth, shaping and fitting the wooden handle, and sharpening and setting the teeth. There are numerous designs of saws, each intended to perform a particular task.

Today there are two businesses making saws in the UK: Skelton Saws in North Yorkshire make a very small number of high-end saws using predominantly eighteenth-century production techniques. Thomas Flinn & Co. in Sheffield make saws on a larger scale, and have four skilled makers.

Further information: www.flinn-garlick-saws.co.uk and www.skeltonsaws.co.uk
Spade making

The making of spades and shovels, specifically with forged heads and usually with wooden handles.

Spades, shovels and forks traditionally had forged metal heads attached to wooden handles. The very earliest spades were made by blacksmiths as one-offs using an anvil and hammer, but with the Industrial Revolution the forging became more mechanised, yet still highly skilled, with the use of the power hammer. The first power hammers were powered by water, and later replaced by steam and then electricity. Dies were used under the power hammer to increase the speed and consistency of production.

Bulldog Tools were the last major manufacturer forging spade and shovel heads in the UK. However, in 2014 they outsourced the forging to India, although they still make the handles and assemble the tools in the UK.

Today there is only one manufacturer of spades with forged heads in the UK: Patterson's Spade Mill in County Antrim, owned by the National Trust. The spade mill has one of only two operational tilt hammers in the UK, and the heads are forged from a solid billet of steel.

Further information:
https://www.nationaltrust.org.uk/pattersons-spade-mill
The making of swill baskets, made from woven strips of cleft oak.

Oak swill baskets are very strong, hard-wearing baskets traditional to the southern Lake District where they have been made for centuries. The origins of swill baskets are unclear, but it is likely that they started as a cottage industry which then expanded after the Industrial Revolution into its own trade. There were related swills in Derbyshire and Shropshire but both traditions have died out. Swills were used on coal steamships, in mines, mills, ironworks and in many other industries. They also had farm and domestic uses, but this declined rapidly in the post-war years with the rise of containers made from alternative materials such as wire and plastic.

While many traditional British baskets were made from willow rods, a wide variety of other materials has also been used, including cleft wood of different species for oak swills, Sussex trugs and Devon stave baskets. For swill making, small oak trees are coppiced, split into billets and boiled for many hours. The wood is then riven whilst hot and torn apart into thin strips that can be woven into an extremely tight, durable basket.

There are currently two makers of swill baskets in the UK: Owen Jones MBE, the only full-time swill maker, and Lorna Singleton, both in Cumbria.

Further information:
http://www.oakswills.co.uk
Tanning with oak bark

The process of using oak bark tanning to convert raw hide or skin into leather.

The tanning of animal skins and hides to turn them into leather using tannic acid from vegetable matter, known as vegetable tanning, has been undertaken for millennia. Oak bark was traditionally used because of its high tannic acid content. In the mid-nineteenth century it was discovered that a chromium solution could also be used to tan leather, and chrome tanning was subsequently adopted by many tanners.

In oak bark tanning, the bark is stripped from felled oak trees during the spring and summer seasons and dried out for two or three years, before being ground down and soaked in cold water to draw out the tannic acid. When the tanning solution is strong enough, hides are suspended in pots of it for three months. The hides are then removed and laid flat, one on top of the other, in deeper pits where they remain for nine months. When the hides are taken out of the pits, they are dried for two or three days, at which point they are ready for finishing.

A downside of using oak bark for tanning is that it is a slow process, taking up to fourteen months. However, it produces a leather that has a better tensile strength, a better appearance, and lasts longer than chrome-tanned leather, although these qualities might only show after twenty years’ wear. Oak bark tanned leather lies at the high end of the market, and is used for shoes, saddlery, luggage and fashion goods.

There is only one oak bark tannery in the UK where most of the processes are carried out by hand: J & F J Baker & Co. Ltd. in Devon.

Further information: http://www.jfjbaker.co.uk/
Intangible Cultural Heritage

From Austria and Afghanistan to Uzbekistan and Zimbabwe, 172 countries of the 194 countries in the United Nations have signed the 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage.

The UK is one of the 22 countries that have not signed the UNESCO Convention.

Tangible cultural heritage refers to the physical aspects of heritage, such as monuments, buildings and artefacts. These are well-cared for in the UK by various organisations.

Intangible cultural heritage refers to the non-physical aspects of heritage – that which cannot be seen – and includes traditional craft skills, knowledge and techniques.

Ratification of the UNESCO Convention would recognise the breadth of the cultural heritage in the UK, and ensure that traditional craftsmanship, as well as other forms of intangible cultural heritage, are better safeguarded for the future.

The HCA has asked the Government why the UK has not signed the Convention; we have not yet received a reply.

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<th>What can you do?</th>
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<tr>
<td>1. Join the Heritage Crafts Association: <a href="http://www.heritagecrafts.org.uk">www.heritagecrafts.org.uk</a></td>
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<td>2. Make a donation to the HCA so that we can do even more to support heritage crafts.</td>
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<td>3. Sponsor a craft trainee. To discuss how you could become involved, contact: <a href="mailto:info@heritagecrafts.org.uk">info@heritagecrafts.org.uk</a></td>
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<tr>
<td>4. Let us know if you are aware of a heritage craft that is not listed in this publication or if you have further information to add about any craft. Contact: <a href="mailto:redlist@heritagecrafts.org.uk">redlist@heritagecrafts.org.uk</a></td>
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*We sincerely hope that this research will act as a call to action to those who have it within their power to resolve or alleviate the issues affecting heritage crafts in the UK, and that this project will mark the start of long-term monitoring of heritage craft viability and a shared will to avoid the cultural loss that is borne each time a craft dies.*

For the full report on The Radcliffe Red List of Endangered Crafts please see: [http://redlist.heritagecrafts.org.uk](http://redlist.heritagecrafts.org.uk)