

ARCHAEOLOGICAL LEATHER GROUP NEWSLETTER

55 March 2022

visit the ALG website at
www.archleathgrp.org.uk



CONTENTS

- 2 Editor's note; Two recent meetings
- 2-4 The 2022 AGM; 'Tutankhamun's leather'
- 4 *Pits and Boots: A tanning site in medieval Aberdeen*
- 5 Zlín: Shoes in History 2021
- 6-11 *Some Leather Finds from Drumclay Crannog*
by John Nicholl
- 11-13 Your Questions to ALG
- 14 *A seventeenth century concealed shoe from Rochford, Essex* by Quita Mould;
The Sutton Hoo Shoes
- 15-16 *A new book on 16th-20th century carved leather upholstery* by Franklin Pereira
- 17-18 French Journal: *La Peaulogie*; Book Review
- 19 When is Leather not Leather?
- 20-21 Treasurer's Report; Subscriptions
- 22 Contact details for the Committee

Editor's note

Greetings to all Newsletter readers. Once again members' contributions have resulted in an issue packed almost to bursting. Thanks to all who have contributed either before or, particularly, after Yvette Fletcher (ALG Chair) wrote to you pleading for Newsletter copy! This was such a successful move that I hope it will be repeated every 6 months.

Since the last issue we have held two more in our series of Zoom meetings, which has been an unexpected positive outcome of the Covid pandemic. They have allowed a wider international attendance at our meetings than would otherwise have been possible and have also helped to develop the technical abilities of those who host and facilitate the meetings, and make the resulting videos available online.

John Nicholl's presentation on the Irish leather finds from Drumclay Crannog before Christmas led to much interested discussion and we are grateful that he has provided an article on the subject for this newsletter. This will allow others to follow up detailed references to the unusual group of early, high quality boots which he referred to in his talk. Courtesy of Angela Middleton, the meeting ended with a leathery quiz which may well become a Christmas tradition in future.

The next Newsletter will appear in September 2022. Articles, book reviews, notices, comments and questions will all be most welcome and should reach me, please, by the deadline of Monday, 29 August.

Sue Winterbottom

Recent ALG meetings:

The last two meetings have continued to be held *via* Zoom, although it is very much the intention of the Committee to re-introduce 'in person' meetings as soon as practicable. Online meetings have allowed wider participation, however, so we hope that future meetings can be hybrid - with a mix of in person and virtual attendance.

Cover illustration: Richter Tannery, 1872-1928
from p.106 of *From Bark to Boots...*
(see pp. 17-18 below)

Roman Footwear in Context

28 September, 2021

with Elizabeth Greene

Prof. Greene spoke about the current state of research on the leather finds from Vindolanda and some of the aims of future work. The site has produced the largest assemblage of archaeological leather from anywhere in the Roman world (7,393 items to date, including over 4,000 shoes). Digitization of the whole collection is currently a work in progress, with the aim of making it accessible online to researchers with comparative material. 18 ALG members attended the meeting which was followed by questions and discussion.

Leather from Drumclay Crannog

15 December, 2021

with John Nicholl

John described leather finds from the excavations at Drumclay Crannog, Eniskillen, which took place in 2012-13. The site was occupied between the 8th and the 17th centuries and among the finds is a group of 9th century low boots which are of considerable interest. An article describing these finds appears later in this Newsletter.

Pieces of leather with apparent bite marks were also found at the site, which led to discussion as to whether the marks were indeed from teeth, or might be from a pincer-like implement used to stretch the leather. An article by Quita Mould, with an illustration of such an implement, was referred to and can be found in our Newsletter for September 2003 (No.18, page 1).

15 members attended the meeting. If you could not attend, links to videos of this and the Vindolanda meeting are in the Members' section of the ALG website.

Forthcoming meetings:

Notice of the ALG's

2022 AGM and Spring Meeting

**Friday, 27 May from 11.30 GMT
at Northampton**

This year the Annual General Meeting will be held both in person and by Zoom. The meeting

will start at **11.30am** at the **Northampton University Leather School** (official name ICLT) on the University Waterside Campus, NNI 5NX.

Please register to attend the meeting by emailing Yvette Fletcher,

ALGArchI@outlook.com

no later than Friday, 8 April, stating whether you will attend in person or via Zoom.

At the AGM we will be electing a new Ordinary Member to join the ALG Committee. If you are interested in putting your name forward for election, then please contact Yvette by 31st March.

In the afternoon we will visit the recently refurbished Northampton Museum and Art Gallery mainly to look at the Shoe Gallery. Starting at **2.30pm** Rebecca Shawcross (Senior Shoe Curator) will give a short talk and overview of the museum's redevelopment and the new Shoe Gallery and will answer any questions. The museum is in Guildhall Road (NNI 1DP) and about 15-20 minutes walk from the university campus.

'Tutankhamun's Leather: Evidence from the Tomb'

This was the title of an online presentation by André Veldmeijer to the American Research Centre in Egypt (ARCE DC) in November last year. About 50 people participated, from many countries and including a few ALG members. By the end we were able to appreciate how important the photographs taken by Harry Burton during Howard Carter's excavations are to any understanding of the surviving leather objects, many of which are now much deteriorated.

André gave an introduction to the nature of what we call 'leather' and the conditions affecting its preservation. He summarised the relative frequency of leather finds from the Predynastic period through to the New Kingdom (c. 1550-1070 BC), when there appears to have been an explosion in its use to make a variety of objects. We were shown slides of many different objects from this period: sandals, shoes, quivers, bow cases, chariot coverings and other chariot com-



Burton outside Tutankhamun's tomb, 1923
(from Wikipedia)

ponents. He then concentrated on the leather from the tomb of Tutankhamun himself (c. 1333-1323), stressing the absolute dependence of researchers on Carter's notes and Burton's photographs for any reconstruction work.

This was particularly true of the two chariots, where most of the leather still attached to the frame has 'melted' to a sticky black substance due to humidity. Another example was the cuirass – an exceptional example of leather scale armour, apparently folded complete and placed in a box when discovered and photographed, but which has greatly deteriorated post-excavation. Better preserved is an assortment of sticks and staves on which exquisite details of their decoration have survived - see the article in [ALG Newsletter 51](#) (March 2020) by André Veldmeijer and Salima Ikram. While these, in common with most finds of the period, were decorated with leather coloured red and green a very rare area of blue leather was found decorating one of the gold plaques attached to a chariot.

As examples of the many research topics currently under investigation, two were highlighted: the likely introduction of leatherworking styles and techniques from Asia Minor (as evidenced by some open shoe styles) and the influence on Pharaonic (and earlier?) leather artefact production of the techniques of Nubian leather workers (rather than *vice versa*, as was once supposed). The topics covered led to many questions being posted on the chat – most of which

are not likely to be easily answered any time soon.

I hope I will be forgiven for any errors in this account – I didn't make notes at the time as the material was far too absorbing. Also, we were asked not to make any screen grabs because of the ongoing nature of the research. So my summary has to be from memory (increasingly unreliable!)

Sue Winterbottom

An important tanning and skin processing site in medieval Aberdeen

Quita Mould writes:

Members will be interested to learn that a large assemblage of medieval leatherwork from Aberdeen has been recently reported on by Clare Thomas and published in

Michael Roy (2021), **Pits and Boots. Excavations of Medieval and Post-Medieval Backlands under the Bon Accord Centre, Aberdeen**, Oxford, Archaeopress.

You will see from the book's title that the leather is one of the 'stars of the show' and Clare's report occupies 14 pages with 18 items fully catalogued and illustrated in 6 figures. Items of footwear, sheaths and a scabbard, straps and clothing as well as waste leather are all described and discussed.

Two aspects of this leather assemblage particularly grabbed my interest; the amount of deer-skin used and - whatever is that wonderful, studded panel? There is more: an interesting report on animal pelts and fibres by Penelope Walton-Rogers (pp.146-8) describes the evidence for different coloured sheepskins and goatskins, along with calfskin and cow hair, principally associated with the de-hairing of hides and skins prior to tanning.

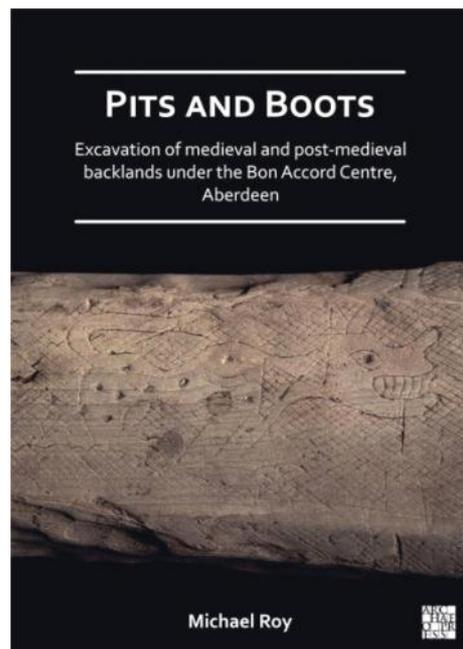
The animal bone report by Jennifer Thomas and Jackaline Robertson (pp.214-222) provides additional evidence for skinning, as well as tanning related activities such as horn working. Michael Roy, the principal author, summaries all the physical evidence found for tanning taking place

at the site from the late 12th century onward and cites documentary evidence for allied trades in the later medieval period (pp.246-8).

Brian Ayres in his review of the monograph (**Medieval Archaeology** 2021, Vol 65/2, 442-3) does point out with regret that the ceramics from the site, 'the largest such assemblage ever retrieved from an urban excavation in Scotland', have not been fully reported on and, consequently, the ceramic data has not been incorporated into the site narrative. All the more reason then to celebrate the leather, animal hair and other organic materials that are so well reported. The publication is available in print or electronic form and the whole report can be downloaded free of charge from the Archeopress website,

<https://tinyurl.com/mr37pj9f>

so I encourage you to take a look for yourselves.



The report cover shows a boxwood knife handle from the site with a carved monocerus, a mythical creature related to the unicorn.



Shoes in History 2021

The 9th International Conference, Zlín, 12 November 2021

a report by Jana Obročníková

Zlín, in the Czech Republic, has been the central European capital of shoemaking since 1894, when Tomáš Bat'a founded his shoemaking company there. It looks after its heritage by holding this conference every three years.

Last year's conference began with two lectures on the use of 3D scanning and modelling of shoes in museum collections, showing its benefits for non-invasive restoration and how digitizing a collection can create new business opportunities. The speakers were Juraj Šuška and Noline van Enter, both professional footwear designers.

This was followed by an introduction to the new **Footwear Research Centre** of Zlín University by its director Tomáš Sáha, who also took us on a small excursion to their beautiful modern laboratories.

The host of the conference is the **Museum of South East Moravia**, located in part of the former Bat'a factory premises. Its collection of modern footwear begins in the 1930s. Anika Grabec, conservator and restorer at the museum, told us about the problems in restoring modern synthetic materials damaged by bad conditions during storage and exhibition. The curator of the museum, Michal Heinrich, gave a lecture on "Manufacturing for the Wehrmacht: second world war military and work footwear made by the Bat'a company". This contained interesting insights into substitute materials used in wartime, when materials were scarce.

Alois Láznička spoke about **The Bat'a School of Labour Graduates Club** (Klub ABŠ), founded in 1933, which aims to keep alive the history of the company and city's shoemaking craft for future generations. He took us to their new building, where they are setting up a new school for footwear enthusiasts and giving local small businesses workshop space if they also run training programmes. One of these companies is Kave footwear who were also represented at the conference. They make eco-friendly sneakers with soles made from rubber offcuts and coffee grounds, using machinery from the 1950s:

<https://www.kavefootwear.com/en/>

The presentation perhaps of most interest to ALG members would be the talk by Martina Hřibová on men's footwear from the second half of the 16th century, based on post-mortem inventories from Valladolid in Spain. It is based on 548 post-mortem inventories of members of higher Castilian society, dating to between 1550 and 1599. The study concludes that the most common shoes were low *zapatos*, and high *botas* and the inventory information corresponds with shoes depicted in contemporary paintings. The author is researching Spanish fashion in general of that time and organized a conference on "Clothing in History" which was held the following day.

The conference attendance was hybrid, half being present online, and I think this will continue in future. It should be possible to obtain the proceedings of both conferences in future from the curator of the museum. There is more information on their website:

<http://www.muzeum-zlin.cz/cs/stranky/shoes-in-history/>



Above: Tomáš Bat'a, founder of Bat'a Shoes
Below: Sneaker, ZIPPER 55/3/8
by Kave Footwear

Some Leather Finds from Drumclay Crannog

by John Nicholl

This article is a summary of the Zoom presentation made to the ALG on the 15th December 2021.

Drumclay Crannog was located just to the east of the town of Enniskillen in Co. Fermanagh and was sufficiently visible in 1836 to be included on the first Ordnance Survey maps of Ireland. The Crannog was excavated in 2012/13 to facilitate the construction of a relief road around Enniskillen. The excavations revealed a multi-layered structure with evidence of use and occupation from the late 8th to the 17th century.

There was a total of 435 leather finds recovered. The bulk of the finds consist of individual shoes, boots and isolated parts as well as a large quantity of repair off-cuts and patches. The footwear includes examples of shoes and boots of one-piece and composite construction. There are nine different types of shoe and boot in the assemblage, some of which have not previously been published in Ireland and have been classified as Drumclay Types 1 – 4, as well as several examples of Lucas Type 3 and Lucas Type 5 shoes.

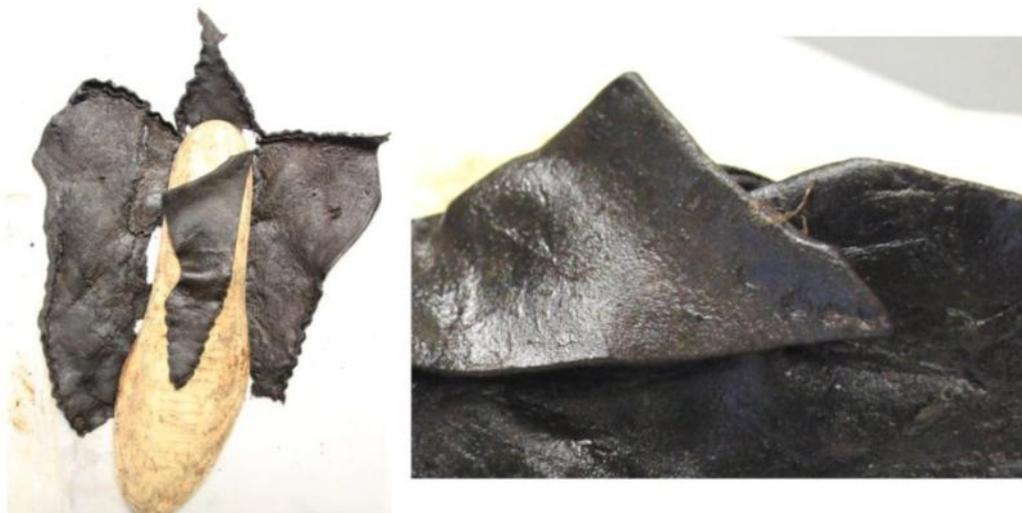
The identifiable footwear included three almost intact calf-high boots, four almost intact one-piece shoes, one almost complete single-piece upper shoe with a vamp stripe, one almost complete Lucas Type 5 latchet-closing shoe, one in-

complete composite-soled shoe as well as related parts such as vamps, quarters, soles, top-bands, rands, latches, clump-repair soles, lacing thongs and leatherworking off-cut scrap.

The shoes are typical of footwear recovered from Irish and European sites from the late eight to the late fourteenth-century with the exception of the three calf-high boots and various associated boot parts, which have not previously been recorded. The boots were recovered from the lowest levels of the crannog. All of the footwear shows evidence of heavy wear damage and, in some cases, attempted repairs, before being cut up for re-use or discarded. Certain design features of this boot type, in particular the V-extension of the sole, suggest a mid-ninth to mid-eleventh century date for its use.

The other identifiable items recovered included decorated leather fragments, pouches, a small satchel, and a number of scrap pieces showing the probable imprints of human teeth marks. Three of these scrap pieces are stray, triangular shaped off-cuts. F2279 C4526 has just one bite imprint on one edge, F2213 C4467 has two separate bite marks, again on one edge while F2044 C4446 has a line of four separate bites along its longer edge.

The fourth example of bite marks is on the triangular-shaped insert of the vamp of a one-piece shoe F2726 C4655. The shoe was cut from a single piece of thick leather with the seat extending into a broad V-shape. Closed seams with grain/flesh stitch holes were used for all seams. The leather was sewn while wet with a length of



F2726 C4655 one-piece shoe with bite mark on right edge of insert and V-extension at heel (Photos J. Nicholl).

thong, which was passed from side to side in an 'S' movement and which had the effect of leaving a scalloped pattern along the seams.

The vamp-seam, which reached from toe to mid- instep, was completed with a triangular insert, which was sewn in place to act as a tongue at the instep. The quarters are ankle-high on both sides and there is a pair of thong keepers on the left side. The sole has split along the centre line due to heavy wear damage. The left side of the vamp-tongue has been cut away in antiquity. A line of human teeth marks can be seen at the top right corner of the vamp-tongue. The teeth impressions may be the result of the shoemaker holding the shoe between his teeth by the vamp-tongue while making the cut. The V-extension of the sole reaches to the top-edge of the quarters and ends in a small flap. The tread and toe areas of the shoe are missing. In all four cases, the bite marks are deep and well defined and remain clearly visible post-conservation. All four examples are from the early levels of the crannog and are probably of 9th century date.

While F2726 C4655 is a roughly made example of a one-piece shoe with a V-extension at the heel, a number of well-made boots with V-extensions at the heels were also recovered. There were two almost complete examples of a calf-high boot as well as twenty-four off-cut parts, which could be clearly identified by reference to the more intact examples and which make it the most represented on site. The isolated parts included backparts and vamps.

There was a single example of an ankle-high boot. The calf-high boots have been classified as Drumclay Type 1a and the ankle-high boot as Drumclay Type 1b. In each case, the upper consists of a separate vamp and one-piece backpart, seamed at the wings with short oblique side-seams. The side-seams incline towards the heel. The pointed vamp-tongues vary in height and some are slightly asymmetrical in that the tip of the vamp-tongue lies to the side of the instep rather than at the centre.

The backparts are between ankle and lower calf in height. A large flap extends from above the side seam, wrapping around the ankle to close on the lateral side of the foot. The boots are secured by two sets of leather button-toggles and fastening loops, which are anchored on the backpart flap and the opposing wing, respectively. The toggles are made from a narrow strip of leather, which is slightly wider at one end than



Right side of F2539, calf-high boot, Drumclay Type 1a showing side-seam and rand (Photo J. Nicholl).

the other. The wide end is rolled tightly towards the narrower end, which is threaded through a slot to form the bean-shaped toggle. There were two such toggles attached to the closing flap of each boot. The flaps themselves have developed a series of undulating folds where they closed over the instep.

The top-edges of the calf-high backparts are all folded-over and hemmed on the inside with a binding stitch. This is very neatly done at the flap -corners by removing a small triangle of leather to allow for a flat seam. The backparts and vamps are all of strong, well-tanned leather of 2mm in thickness. The side-seams are all approximately 20mm in length and sewn with an edge/flesh butt seam. F2539 C4314 has a short strip of leather, similar to a rand stitched into the side-seam. A continuous rand was also inserted between the uppers and soles of the boots for the full length of the sole seam.

In all cases a blunt, triangular-shaped piece of leather was removed at the heel of the backpart to accommodate a V-shaped extension on the



Left side of F2539, calf-high boot, showing side-seam and toggle closing loops. Note folded hem on top-edge and rand at side-seam (Photo J. Nicholl).

sole. The resultant gap is large enough to accept the full length of the V-shaped heel extension as well as the continuous rand, which was sewn between the upper and sole. In the case of F2539 C4314, the rand still retains a sharp kink, which was caused by it being sewn around the point of the V.

The boots had soles with broad rounded-toes and a wide tread. There is only a slight narrowing at the waist and seat. The seat is extended with a V-shaped heel extension, which ends with a sharp point. The soles are in very fragile condition and appear to have delaminated. The grain/flesh stitch holes at the sole-seams raise the possibility that two thin soles were sewn together with the rand and upper instead of a single thicker sole. The inner surfaces of the soles of F2539 C4314 and F2710 C4467 show an indistinct grain pattern and the outer edges are turned upwards at the sole-seam, which is consistent with the use of two thin soles and a closed stitch to join the uppers with the soles.

The boots show signs of heavy wear. Both F2539 C4314 and F2692 C4467 were roughly repaired in antiquity. In each case, a row of widely spaced grain/flesh awl holes was punched along the edge of the vamp where the sole-seam had worn away. These holes would have been used to secure a patch over the torn seam by sewing with thong to the vamp and sole. A clump repair sole F2391 C4467 with grain/flesh awl holes was also recovered from the same context.

There was only a single example of the Drumclay Type Ib recovered. F2692 C4467, is an



Rear view of F2539 showing V-shaped heel extension with rand (Photo J.Nicholl).



F2692 C4467 Drumclay Type Ib Ankle Boot, note holes for repair patch (Photo J. Nicholl).

ankle-high boot and differs in some details from the Drumclay Type Ia examples. It consists of an incomplete sole, vamp and one-piece backpart with oblique side-seams. This boot is made of thicker leather and the quarters rise to ankle height. The quarters wrap over the instep to close on the lateral side of the foot. The toggles are missing and a series of holes around the edge of the vamp indicate where a repair sole was attached. The boot would appear to have been worn on the left foot. The one-piece quarters have split at the back of the heel, where the slot for the V-shaped heel extension was located, and are now in two parts. All of the Drumclay Type Ia and Drumclay Type Ib boots were recovered from contexts in the lower levels of the crannog.

There are two examples of incised decoration on two isolated boot-vamps, F2410 CM71 and F2735 C4655 from the southern sector of the crannog. In each case the vamps are decorated with a linear motif, which was impressed into the leather with a pointed object and runs from

vamp throat to the toe. The decoration consists of a narrow, elongated triangle, not unlike a knife-blade, which, on vamp F2954 CM71, is in-filled with a key pattern, similar to decoration on E1 and B2 type knife sheaths from Dublin (Cameron 2007, 15-20).

On the second example, F2735 C4655, the motif consists of two parallel lines, one slightly longer than the other, which converge to a sharp point on the instep, where the longer line continues for approximately 25mm, before branching sharply downwards to the right. There are faint traces of an infill pattern in the space between the two lines, however the design is not clear. The longer line, to the left, is more heavily impressed into the leather and bears a striking resemblance to the runic *L*.

Certain constructional elements of the Drumclay vamps, such as the side-seams, vamp-tongues and decoration of the vamps are directly comparable with vamps recovered from the Deer Park Farms excavations. The DPF vamps were recovered from late-seventh to late-eight century AD levels and are particularly significant for having decorative vamp-stripes and a short seam at each side of the instep. DPF vamps F1756B and F1756C have an oblique side seam at each side, a high vamp-tongue, a decorative vamp-stripe and two thong keeper-slots at the instep, midway between the two side-seams (Neill 2014, Fig. 21.3, 370).

A number of broad and straight soles with rounded toes and heels were also recovered. Based on the sole design and in the absence of a matching upper back-part, Neill posited a possible reconstruction of a boot with separate vamp and quarters. The quarters terminated on either side of the instep vamp-tongue but did not overlap and the sole had a rounded seat and toe. The suggested reconstruction was fastened by thongs, which looped around the ankle and passed through the two keeper-slots on the instep (*ibid.* 368-383).

Drumclay Type Ia boots F2539 C4314, F2614 C4467 and Type Ib F2692 C4467 retain some features of this suggested Deer Park Farms design. The Drumclay vamps have two side-seams on either wing with a high vamp-tongue at the instep. However, the thong-keeper slots on the instep are absent. The one-piece, wrap-around quarters at Drumclay fold over the instep and are secured at the lateral side with a pair of tog-



Drumclay Type Ia vamp F2954 CM71 with decorative key motif and, below, Type Ia vamp F2735 C4655 with decorative motif - possible Runic letter (Photos J. Nicholl).

gles as opposed to a lacing-thong. The decorative vamp-stripe is also missing and would appear to have been replaced by a simpler tooled motif, as seen on F2735 C4655 and F2954 CM71, or no decoration at all.

A close analysis of two boots, W19 and W20, in the collection of the National Museum of Ireland, shows significant parallels between the constructional elements of the Drumclay Types Ia and Ib and Deer Park Farms boots. Such a comparison is also significant for the dating of W19 and W20, which were included in Wilde's catalogue of antiquities in the collection of the Royal Irish Academy in 1861 but were omitted by Lucas in his study a century later.

The recorded description of W19 from Wilde's Catalogue reads as follows: "No. 19, a strong, leather buskin or **half boot** [figured on page 158]. It is of **thick, coarse leather**, of a tan or dirty-

yellow colour, similar to that of the boots worn in Madeira and the islands of the Canary Archipelago. It is now 11 inches long, and was formed on **the plan of a turned pump, with a double sole: both, however, together with the upper and welt, being included in the same stitch. A long triangular heel-piece, carried up from the sole, is ingeniously inserted between a slit in the upper, as in some of the very rudest single-piece shoes, so as to give a comfortable rotundity to that part. A large flap overlaps the instep, the loops for fastening which still remain, and a stout piece of thong is stretched across the angle between the vamp and upper to prevent breakage or straining.** It was found in 1790 in a bog in the townland of Belladrihid, parish of Ballisadare, county of Sligo, and presented by the



NMI Boot W19 Belladrihid, Co. Sligo. (Photo J. Nicholl). This image is reproduced with the kind permission of the National Museum of Ireland.

Duke of Northumberland, who purchased it with the collection made by Mr. R.C. Walker". (Wilde 1861). In the case of Drumclay Type 1b F2692 C4467, the similarities of shape and constructional detail are particularly striking. Both boots are approximately the same height at the quarters, are made from the same thickness of leather, have toggle holes located at the same points on the instep flap and quarters, and have similar side seams between the vamp and quarters.

None of the sewing thread or thong has survived on any of the Drumclay boots. This could be considered as unusual if leather thong had been used to stitch the uppers and soles together. All of the construction seams on W19 are intact and show that a twisted, textile thread was used to assemble the boot with closed seams to join the double sole, rand and uppers. A similar type of thread may also have been used on the Drumclay boots.

The recorded description of W20 reads as follows: "No. 20, a laced left boot, of stout, tanned leather, uncoloured, 9 inches in the sole, and 8 ½ in the leg, laced half way up in front. It has a single sole, which was turned without a welt, **being attached to the upper with gut. An ornamental seam runs up the front, which rises into a peak. The angle, between the vamp and quarter is protected by a strong leather thong, and a small piece has been inserted into the upper at the turn of the heel, in order to remove the angularity at that point; ingeniously contrived thongs** fastened this boot in front. It was found in the Queen's County, and presented by Mr. M. Gill" (ibid.).



NMI Boot W20 County Laois with short side seam (Photo J. Nicholl). This image is reproduced with the kind permission of the National Museum of Ireland.

In this case, only certain elements of the No. 20 boot correspond with the Drumclay Type 1a boots. The most obvious similarities are the height of the quarters and the uppers, which are assembled from separate vamp and backpart with short side seams. There is a short rand inserted in the side seams. The vamps rise to a peak on the instep and the side seams are reinforced with an extra thong cord. A comparison of the "ingeniously contrived thongs" of W20 with those on the Drumclay Type 1a boots shows them to be of the same design (see photos opposite). However, W20 does not have the V-shaped heel extension of the Drumclay Type 1a. Instead, the heel of the sole is rounded as on the Deer Park Farms soles and a separate insert, which could be considered as a proto-heel extension, is sewn into a matching recess in the heel of the backpart.



Above: lacing thong of W20, below: lacing thong of Drumclay Type Ia boot. (Photo J. Nicholl).

Perhaps it can be considered as a stage in the evolution of the rounded sole of the Deer Park Farms style into a Drumclay Type Ia and Ib style sole with a V-shaped extension at the heel. Other published examples of boots and ankle shoes of this period with V-extensions on the soles, were constructed using one-piece uppers (Hald 1972, O'Rourke 1988, Mould *et al.* 2003, Volken 2014, Goubitz 2001). The Drumclay boots appear to have been luxury items requiring a secure supply of high quality leather and shoemaking skill, which would appear to have been available when the boots were originally made, but must be seen as in some doubt by the time they were roughly repaired and finally discarded.

References

- Cameron, E. 2007, *Scabbards and Sheaths from Viking and Medieval Dublin* National Museum of Ireland, Ser. B, vol. 8
- Goubitz, O. *et al.*, 2001, *Stepping Through Time: Archaeological Footwear from Prehistoric Times until 1800*, Foundation for Promoting Archaeology, Zwolle.
- Hald, M. 1972, *Primitive Shoes*, National Museum of Denmark, Copenhagen.
- Mould, Q. *et al.* 2003, *Leather and Leatherworking*

in Anglo-Scandinavian and Medieval York, YAT, York.

Neill, M. 2014, *The Leather Objects* in Lynn, C. *et al.* Deer Park Farms, The Stationery Office, London.

O'Rourke 1988, unpublished MA Thesis (UCD)

Volken, M. 2014 *Archaeological Footwear: Development of shoe patterns and styles from Prehistory till the 1600's*. Lausanne.

Wilde, W. 1861 *Descriptive Catalogue of the Antiquities of Animal Materials and Bronze in the Museum of the Royal Irish Academy*. RIA. Dublin.



Chewing or biting leather

During our meeting with John Nicholl in December 2021, there was a discussion of the significance of apparent 'bite marks' on the leather finds from Drumclay Crannog. Coincidentally, in **November 2021** the ALG had received a query from Rebecca Whiting, a bioarchaeologist at the British Museum (Department of Egypt and Sudan), about wearmarks on human teeth, possibly indicative of activities involving leather. She wrote:

I have several examples of wear on the inside of the upper teeth in Medieval individuals from Sudan. I was wondering if the pulling of leather to soften or stretch (?) it could have been done using the teeth. I know that chewing to soften leather is seen in arctic groups ... but the dental wear has quite clear directional striations in some individuals and would necessitate the pulling of something forward while being gripped in the teeth.

I don't know if this kind of activity has been seen anywhere in leather working or if it might be a completely different activity causing such wear.

There was a response from Theresa Emmerich

(University of Exeter):

Hi Rebecca,

So, softening leather using your teeth is very inefficient. A lot of the arctic examples are to do with very specific activities such as partially softening soles, crimping soles, rehydrating hard spots by chewing to then soften them with tools, or I've also found a few creditable references to working very thin skin such as bird using their teeth. But, there is pretty much no one who softens a skin such as goat, sheep, deer, or antelope etc. using their teeth.

I would suggest looking at fibre processing as a potential culprit. I have definitely read references somewhere to sinew thread causing tooth wear. I imagine plant fibre thread for sewing things such as clothing or perhaps baskets in that region might produce a similar wear pattern?

Just my two cents here on what sounds like interesting research!

Rebecca replied:

Hi Theresa,

Thanks so much for this that's really helpful. I'll take a closer look at the arctic examples, I've not heard of using bird leather before! Regarding the sinew and fibre processing, I definitely have some wear which I think is being caused by this, there are so many examples of sinew and flax use in the groups I'm studying, that it is very clear this is one of the activities which is likely causing some of the wear. It was just that the anterior wear on the inner surface of the teeth was different and baffling me slightly.

I'll keep looking at some other possibilities for that as well, but again thanks so much for the information.

A contribution to this discussion (and relevant too, to that following John Nicholl's talk) also came from Serge and Marquita Volken:

As follow-up to the question of wear marks of leather on teeth we have it the other way around, occasionally running across leather scraps with teeth marks on them.

There is a small sculpture at the Bally shoe museum showing a scene where one of the protagonists is holding a piece of leather between his teeth and pulling it with both hands.* It is the only way to stretch a piece in three directions at once. This way of pre-stretching the leather prevents stretching during the use of the shoes, that would turn an elegantly

fitting shoe into a kind of foot bag in no time.

I even found a citation pointing out that such practice wasn't uncommon:

"Juristen sind wie Schuster die zerren mit den Zähnen das Leder, sie die Rechte, dass sie sich müssen dehnen" (Friedrich von Logau 1605.1666).

Translation: "Lawyers are like shoemakers who stretch leather with their teeth, just as they stretch laws to make them fit."

I hope this can help.

*Sorry I don't have the exact reference of the miniature at hand right now, but I could do a little investigation if need be.

Painting on leather or skin

In **October 2021** we had an unusual enquiry from Emma Turner, a senior conservator in Western Art at the British Museum, who has been researching some 18th century paintings on skin. She wrote:

They are a series of paintings by Marco Ricci which are variously catalogued as being tempera or gouache, on leather or kidskin.

What we can definitely say is that they are paintings which were executed on a skin support, dating to c.1720s – 1730. There seems to be very little precedent for them and no obvious reason for Ricci to have chosen leather as his support material. Most of the paintings which I have seen are on a brown dyed leather (possibly vegetable tanned), whilst some appear to be on alum-tawed skin. Historically, the leather was attached around a wooden panel or strainer, then framed.

Emma provided links to images of 3 of the paintings; the example opposite - a pastoral landscape in the Metropolitan Museum of Art - shows the edges of the skin support. She went on to ask:

Would it be possible to put out a query in the archaeological leather group to see whether anyone has seen any parallel to these works, and whether there are any resources related to the trade and/or manufacture of leather in Venice during the early 18th Century?

To date, only one response has been copied to the ALG email account and that came from Graham Lampard at the National Leather Collection in Northampton. He drew attention to two



Extensive Pastoral Landscape, by Marco Ricci. Gouache on kidskin.
Metropolitan Museum of Art, New York, Accession Number: 67.67

works in the National Gallery of Art (Washington, DC) which could be of interest. One is an anonymous 15th century painting on joined pieces of parchment and the other a painting of cowslips by Albrecht Dürer in gouache on vellum (1526). He added,

Here's another listing of gouache on "swanskin" - [probably vellum] by Italian artist Tommaso Bigatti who was active around 1800:

<https://tinyurl.com/2s4drt6a>

I'm sure Emma would still welcome any more information about comparative material or on the leather trades in 18th century Venice, where Marco Ricci was working.

Dealing with casual leather finds

In September 2021 we received the photo below of the side of a medieval shoe, with buckle fastening, from Chris Barnard. He had found it while 'mudlarking' in London. He had been keeping it in distilled water in his freezer and although he had approached museums and university labs, neither he, nor they, had funds to have it professionally conserved. He was looking for advice as to the best way he, as a layman, might try to preserve it at least for the medium term.

He does not seem to have received any replies to date, or at least none has been copied to the

ALG email address. I'm sure any advice would still be welcome but this query raises a more general point about casual finds of leather objects by the public - particularly if they are waterlogged. If any of our conservator members could see their way to setting out some notes on the subject it is something that we might usefully include on the ALG website.



Chris Barnard's shoe find



A 17th century concealed shoe from Rochford, Essex

by Quita Mould

In our last issue Northampton Museum's **Concealed Shoe Index** and how to access it via the **Concealed and Revealed Project** homepage was described (Newsletter No. 54 Sept 2021, 11-14). A woman's shoe from a late medieval hall house at 17 South Street, Rochford, Essex GB was one of the items used to try out use of the Index.

I am now able to provide details of the find. The shoe was recovered by workmen from the chimney of a mid/late 15th century fireplace (Fig. 1) during restoration of the house. The restoration work was commissioned by Rochford District Council and included building recording and archaeological excavation undertaken by Essex County Council. Difficulties of access due to the Covid pandemic meant that I was not able to meet the shoe 'in the flesh' but through a series of photographs and with the help of an excellent line drawing (Fig. 2).



Fig. 1 Rochford - the hall fireplace

The leather shoe is essentially complete but damaged at the vamp toe and the heel. It is desiccated and distorted, the back part being crushed out of shape and now extending beyond the heel. The shoe, made straight, is a latchet-tying shoe of welted construction. It is 'open-sided', fastening with latchets that tie over and through a pair of lace holes in the vamp tongue. The toe and much of one side (the left) of the vamp is now missing; what remains is decorated by a series of small, punched, circular holes.

The shoe bottom is square-toed with a separate wooden heel with a leather cover. A half sole extends down the breast of the heel. The full sole beneath, is a 'continuous' sole that continues down the heel breast and forms the integral, D-shaped, top piece of the heel held in place with a row of wooden pegs.

While the wooden heel appears heavily worn down on one side, the wood looks to have been gnawed by vermin which now obscures the degree of original wear. The vamp is notably thick and likely to be of cattle hide. The surface of the leather is very dirty so it is not certain if it is grain side outward or flesh side outward (suede). The visible back seam suggests it is 'flesh out' but the side seams are stitched on the interior which may suggest otherwise. The construction, style and pierced decoration suggest it dates to the first half of the 17th century.

I am most grateful to Patrick Allen and David Andrews, and who are currently writing a report on the hall house for inclusion in a future volume of *Essex Archaeology and History*, for providing the images.

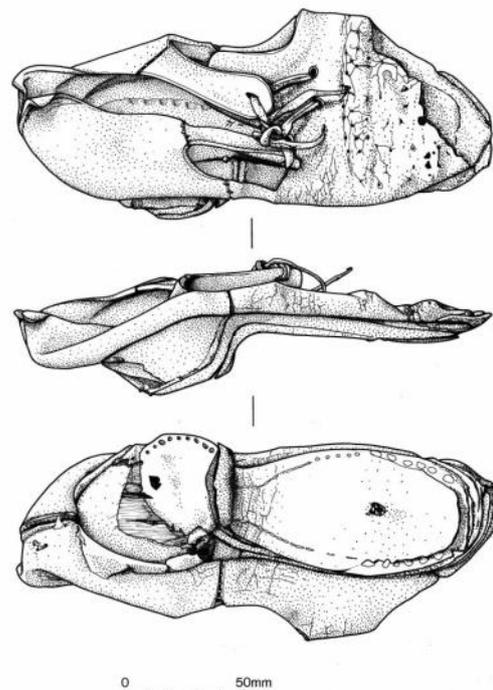


Fig. 2 Rochford shoe, drawing by S. Holden

The Sutton Hoo Shoes

The report on the leather from Sutton Hoo, previously only available online is now in print. The reference is:

Marquita Volken, Quita Mould, Esther Cameron (2021) 'A reassessment of leatherwork from the Sutton Hoo Ship Burial', *The Antiquaries Journal* 101, 160-180.



A new book on 16th to 20th century carved leather upholstery

by Franklin Pereira

Researcher at the ARTIS Institute of Art History,
Faculty of Arts and Humanities, University of Lisbon.
www.frankleather.com

Over 20 years ago I wrote an inventory of a very important collection of Portuguese carved leather upholstery in Portugal stored at the **Guerra Junqueiro House-Museum** in Oporto, which is owned by the city council. Some details of the museum are here:

<https://www.introducingporto.com/casa-museu-guerra-junqueiro>

I suggested publishing the collection several times but was met with no interest. A couple of

times, on International Museums Day, I gave an illustrated talk on several of the pieces.

Then, a few years back, I was asked by the **Guerra Junqueiro Foundation** (which, in 2000, had opened in a building opposite the museum) if I would study their collection as well. To my surprise I found two boxes filled with rather old and worn-out upholstery, removed from its fittings, which some might describe as just rubbish. There were a few V-gouge carvings based on the aesthetics of the Islamic caliphate; there were also scraps of gilt leather – common 18th century examples and also some French ones. After 3 years and with financial help from the Foundation, my book on both collections was finally published.

I illustrate one of the *mudéjar* upholsteries on a straight-back chair. Both back and seat are finely carved (with an incising knife or less blunt chisel?) The back displays 5 birds on each side, amid foliage inspired by the patterns of *al-Andalus*; the borders are formed from double



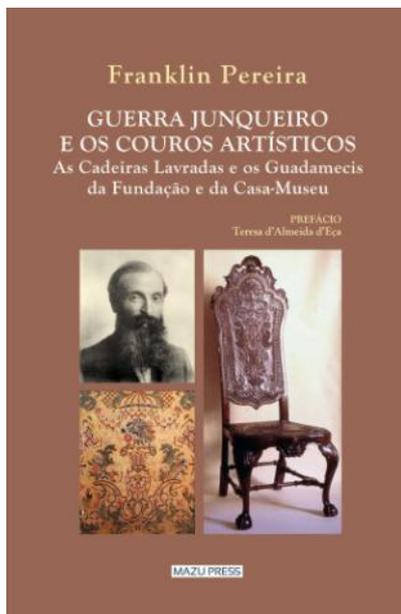
Chair with carved leather upholstery from the Guerra Junqueiro House-Museum at Oporto, Portugal

Top: chair back
Below: chair seat
Right: reconstructed chair

rows of counter-curved arches: a common pattern on wall hangings, whether of gilt leather or textile. The flowers inside resemble the very common ancient pattern of a square on a circle.

The seat has 4 palmettes at the corners of an inner field, as well as other stylizations. We are in the Renaissance and yet Muslim patterns from the 10th century are still in vogue. Here the carving seems to take its inspiration from ivory pieces, other examples recreate the patterns seen in stucco, tapestries, pottery and manuscript illumination. Five centuries after the fall of the Caliphate of Córdoba, yet the Christian elite is still using (and sitting on) such patterns and to the artisans (not *mudéjar* by blood line, but by aesthetic heritage) they were the official ones.

Why should Abílio Guerra Junqueiro (1850-1923), a poet and activist of the first Republic (which started in 1910 with the fall of the monarchy), collect so many chairs and useless upholstery, together with scraps of gilt leather? Clearly he appreciated the arts of leather and, together with some very important antique paintings (later given to Lisbon's Antique Arts Museum), he bought quite a magnificent array of leather upholstered chairs of the Portuguese tradition. So important that, without them, I would have found it hard to study the initial phase of carved leather working.



Book cover

and some further notes on leather.....

Leather upholstered chairs in the Presidential Palace, Lisbon

(a recent article)

Quite regularly Portuguese TV will show party leaders or foreign ministers in the grand hall of the Presidential Palace, where a couple of chairs add to the decoration. Several photos of presidents in stately poses, or receiving visitors, make use of a chair. The Presidential Palace, official residence of the president, is also a museum.



President Mario Soares and Prime Minister Anibal Cavaco Silva sitting on two late 17th century carved leather chairs, at the Portuguese Parliament in 1991.

Some years ago I was allowed to photograph the chairs in the Presidential Museum since no activities were going on. I fixed up a big sheet of paper on the huge veranda facing the river and brought in the chairs one by one. In a recently published article, besides studying the 9 chairs and other upholstery, I've referred to several ancient texts that make clear the hierarchy of official seating - which also covered sitting on cushions when the old manner of "*Moorish sitting*" was still in use. In that period chairs were scarce and usually reserved for high-ranking court officials or kings.

All these chairs described belong to the Baroque period, when the Portuguese carved leather chair was the most iconic piece of furniture; the carvings were outstanding and such pieces were also exported to European courts, the USA, and Portugal's colonies (Brasil, Cape Verde, São Tomé, Goa).

The full article is available free online in the archaeological journal *Al-Madan* (pp. 134-155):

https://issuu.com/almadan/docs/ao25_1

[Editor's note: the article is also temporarily available on the ALG website at:

www.archleathgrp.org.uk/lisbonchairs.pdf

in case you have any problems with the above link.]

Leather art in Lithuania

During a tour of the Baltic countries in 1993, I met Dalia Saulauskaitė, a leather artist and teacher in Vilnius. A few weeks ago she sent me a link to a slide show, '20th century leather design in Lithuania', made 9 years ago for her students. There is an English summary describing the development of artistic leather design in Estonia and Lithuania since independence with 150 photos of modern work. If you are interested it can be seen here:

<https://prezi.com/-0bq2lwncypz/odos-dizainas-lietuvoje/>

French Journal: La Peaulogie

For those who have not yet come across it, Barbara Wills draws your attention to the above publication.

Freely available to read online (with articles in French and English) and available also to buy in printed form, this journal was launched in 2018. It describes itself as a scientific publication offering in-depth, peer-reviewed articles on all things relating to skin, hair and leather in human society.

The seven issues published so far have covered topics as diverse as skin whitening, religious rituals, and the different cultural uses of tattooing. The theme of the latest issue (for 2021) is traditional leatherworking practices and again there is a wide range of articles, including on medieval horse skin, 19th century glove making and the use of skins in Late Antiquity. Altogether, something for everyone! The journal can be read here:

<http://lapeaulogie.fr/en/review/>



Book Review

by Sue Winterbottom



Andrew Sparber, **From Bark to Boots: The History of Tanneries in Western Maryland** (self-published, 2021, 174pp.)

The two counties of Western Maryland, Allegany County and Garrett County further west, have the meandering north branch of the Potomac river as their southern boundary. They were settled from the late 18th century onwards chiefly by first generation Scottish, Irish and German immigrants. In this part of the Appalachian Mountains they found abundant timber, coal and iron and in the course of the 19th century the area became a centre of industrial development as well as farming. What began as small family businesses later amalgamated into larger enterprises or were absorbed by national corporations based in New York or Boston.

So it was with the tanneries. There was a massive need for leather goods of all kinds, initially for boots, caps, saddles and harness, britches, belts and shot pouches; later for drive belts for steam-powered machinery (Fig. 2), for fire hoses and for conveyor belts to be used in mining and agriculture. From the start a tannery was essential to every settlement and the author identifies 26 tanneries founded between 1790 and 1893 in the two counties - 6 of them being in Cumberland, the main town in Allegany County.

At that time the Green Ridge forest of Western Maryland contained vast stands of Eastern Hemlock (*Tsuga canadensis*), together with Chestnut Oak (*Quercus montana*) and other oak species. These were extensively felled and the bark ground for tanning. Hemlock bark produced particularly hard leathers, most suitable for shoe soles and machine belting. So many trees were felled that by 1900 little remained of the forests. At that point the tanneries had to close down, import other sources of vegetable tannins – such as nuts from South America – or convert to the new mineral tanning methods.

Shipping bark to the tanneries became easier once major transport links were established. Construction of the 'National Road' or National Turnpike westwards from Baltimore was authorised by Congress in 1806 and it passed through

Cumberland (Fig. 1). It was followed by the Chesapeake and Ohio canal (from Washington DC to Cumberland) and the Baltimore & Ohio railroad, which further connected the Western Maryland towns. By these routes raw hides, of buffalo and later cattle, could also travel from farms and slaughterhouses to the tanneries, the tanned hides then being exported eastwards.

Later in the century raw hides came in quantity from Chicago, New York and Boston; one instance was recorded of hides being received from England and the leather returned there. As an indication of how the trade grew, the Jones Tannery at Wills Creek, Cumberland was producing 7,000 hides a year in 1830; by 1887 following mechanisation this had grown to 56,000 hides.



Fig. 1 Woodcut of Conestoga wagons on the National Road, early 1800s. *From Bark to Boots*, p.18

For a reader like me, with a very limited knowledge of American history, this book gives some unexpected insights into the pace at which an industrialised society was built from the bottom up, within the space of a modern lifetime. The civil war (1861-65), far from hindering the process, provided a boost to manufacturing of all kinds and leather production was deemed so important that tanners were exempted from the draft.

The book's author, Andrew Sparber, lives in the city of Cumberland and has written about the history of other industries in Allegany County. In researching this book he has used a wide variety of local and national resources. Most interesting are the articles and advertisements from local newspapers, early photographs, and a series of 'Insurance Maps' of individual tanneries. These were drawn up by the local fire department and as well as showing the location and use of each

building on a site they include information such as the number of workers, the production capacity of the site and the method of powering machinery, heating and lighting.

The book is well constructed, richly illustrated and I found it an altogether fascinating read. If you are interested in obtaining a copy, it can be purchased for \$20 on the US Amazon site:

<https://tinyurl.com/4e82h8f7>

With postage, this comes to around £22.00 sterling.



Fig. 2 Author's photo of leather belting being used to drive early steam-powered machinery. *From Bark to Boots*, p.119

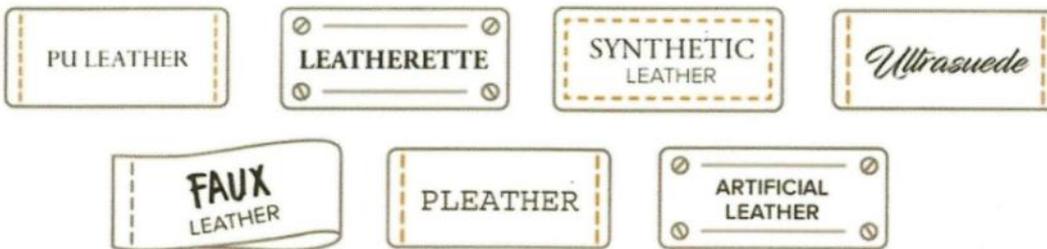


Leather, friend or faux?

Pat Thomson has received the poster below from the industry body **Leather Naturally** and wanted to share it with the leather group. “In the future” she writes, “leather conservators will be faced by an ever-increasing list of names (at best) for these new materials or (at worst) a load of new materials all called ‘leather’ which are not leather at all and will need different treatment.” **Leather Naturally**, meanwhile, is keen for the nature of imitation leathers to be more widely understood. In terms of their environmental impact, durability and ease of repair they are far inferior to the natural product.

WHEN IS LEATHER NOT LEATHER?

DIFFERENT MATERIALS HAVE DIFFERENT BENEFITS, BUT LABELS CAN BE CONFUSING. **GET THE FACTS.**



Synthetic materials made with oil based products, **these are artificial**. They are composed of a substance that is usually made with polyester or nylon coated with PVC or PU.



A mix of natural components that are mostly combined or backed with other materials to give them strength or body. The combination material is often **PU or PVC** so it is important to **check the composition** label if a completely natural product is required.



Any material that is not of animal origin, can be referred to as vegan. It is important to note it **does not necessarily mean natural** and there is no relationship with the environmental impact of the product and whether or not it is biodegradable or can be recycled.



Leather is of **natural origin** and the internationally recognised definition as set down by the International Standard Organisation (ISO) is...**Hide or Skin with its original fibrous structure more or less intact, tanned to be imputrescible, where the hair or wool may or may not have been removed.**

TO BE CLEAR TO CONSUMERS ON ORIGIN AND BENEFITS, THE TERM LEATHER SHOULD ONLY BE USED FOR MATERIALS THAT MEET THIS DEFINITION.

<https://www.leathernaturally.org/>

ARCHAEOLOGICAL LEATHER GROUP
Treasurer's Report for the Year Ending 31st December 2021

Income and Expenditure Account

Income	£
Subscriptions 2021 ¹ (9 @ £10)	90.00
(11 @ £12)	<u>132.00</u>
	222.00

Expenditure

ALG Newsletter costs ²	80.36
Paypal charges	9.24
Website charges ³	192.76
Zoom subscription	143.88
Britten Pears Arts Foundation ⁴	<u>200.00</u>
	626.24
 Deficit for year	 404.24

Balance

Balance as of 31 st December 2020	6616.18
Deficit for year 2021	<u>404.24</u>
	6211.94
 Closing cash balance	 6211.94
 Balance as of 31 st December 2021	 6211.94

¹ Subscriptions for 2021 were waived for those who had paid in 2020. Three had paid in advance, £12 each, in 2020 for 2021, and eight more subs @ £12 were collected in 2021 from those who had not paid in 2020. A further nine subs @ £10 came in from those who had not paid in 2020.

² March £29.91, October £50.45

³ Includes three-year rental in advance until January 31, 2024

⁴ Donation in memory of Roy Thomson

Esther Cameron, Treasurer

Renewing your ALG Subscription

Subscriptions for 2022 became due on 1 January.

The method for paying subscriptions is slightly different this year, please read the following instructions if you wish to renew and have not yet done so.

Archaeological Leather Group Membership Subscription

The Treasurer's contact details:

Esther Cameron: esthercameron.oxford@gmail.com

36 Bertie Road, Cumnor, Oxford OX2 9PS

SUBSCRIPTION rates for 2022 are £10 (UK bank transfer or cheque) or £12 (PayPal)

PAYMENTS

Payment by bank transfer to NatWest bank plc:

Account name Archaeological Leather Group

Sort code 54-21-22

Account no. 24106453

Ref. Please enter 'subs' followed by the first 6 letters of your surname and the first 3 letters of your first name (e.g. Brian Smith would be subsSmithBri)

Please confirm your subscription payment by emailing the Treasurer, giving your name, address, and date of payment.

Payment by cheque payable to *Archaeological Leather Group* should be sent to the Treasurer at the address above. Please enclose your name, address, and email address.

Payment by PayPal: If living outside the UK a PayPal invoice will be sent to you. Please use the link on the invoice, remembering to reference your payment: 'subs' followed by the first 6 letters of your surname and the first 3 letters of your first name (e.g. Brian Smith would be subsSmithBri). If you have not received an invoice by the 4th week of January, please email the Treasurer to request one.

PRIVACY POLICY: Your personal details will be used only to notify you of ALG events and will not be passed on without your consent.

ALG Committee Members 2021-2022

Contact details:

Chair Yvette Fletcher
Wimbledon Park
London
SW19 8EA

email: yvetteaf@hotmail.com

Secretary Angela Middleton
Archaeological Conservator, Historic England,
Fort Cumberland, Fort Cumberland Road,
Portsmouth, PO4 9LD
Tel 023 9285 6787

email:

Angela.Middleton@HistoricEngland.org.uk

Treasurer Esther Cameron
36 Bertie Road, Cumnor, Oxford OX2 9PS
Tel 01865 862645

email: esthercameronoxford@gmail.com

Newsletter Editor Sue Winterbottom
48 Lyndhurst Street, Stoke-on-Trent,
ST6 4BP
Tel 01782 833213

email: winterbottomsue@gmail.com

Meetings Co-ordinator Pieta Greaves
web - www.drakonheritage.co.uk
Tel 07905711414

email: pieta@drakonheritage.co.uk

Ordinary Member

Jana Obrocníková, www.dobraczech.cz/en/

email: obrocnikova@gmail.com

Ordinary Member

Rosie Bolton, The Leather Conservation
Centre, Floor 3, Grosvenor Chamber,
The Grosvenor Centre,
Northampton, NN1 2EW

email: rosielilianne@gmail.com