

CAT 590- Helmet Crest 2

**K31, K49, K73, K139, K363, K397, K519, K535, K541, K616, K629, K868, K950, K1012, K1158, K1177,
K1257, K1261, K1652, K1882, K1973, K5019, K5033**

Condition Report

Conservation Started: 23/11/2015

Conservation Finished: 10/12/2015

Conservator: Kayleigh Fuller

Time Taken: 10.5 hours

Including digital photography, report, conservation and packing.

Dimensions: (L). 14.24 mm; (W of tray). 6.7mm; (D) 2.7-3.8 mm (Th of side panels) 3.2 mm, (Th of base) 1.4mm

Distortions span (w) 43.1mm (D) 41.7mm

Weight before:

K31-0.95g

K1261- 1.00g

K49- 0.44g

K1158- 0.44g

K1257- 0.35g

K73(x2)- 1.03g, 0.08g

K363- 2.11g

K397- 12.47g

K519- 2.34g

K535- 1.58g

K541- 0.41g

K139- 3.00g

K616 (nail) – 6.30g

K868- 0.44g

K950- 0.22g

K1012- 15.50g

K1177 – 0.52g

K1882(x2) – 0.68g, 0.73g

K1652 -1.58g

K5019- 0.91g

K5033- 0.43g

K1973- 0.28g

K629-1.39g

Weight after (with glue etc.): 40.18g not including the horse head

Digital photography:

Taken with a Nikon Coolpix 4500 digital camera, under daylight or bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before, during and after.

Annotation on any of the storage bags or boxes:

K31. 215 (in a triangle/object number). BA 1971. SSH09, 31/07/2009. 1002 XX (NE).
K49- BA 1971 SSH09 L12 1001 225 in triangle 3.7.09
K73- 36 in triangle, 24/7/09
K139- 24/7/09 (unstrat)
K363+K397-118 underlined and day 3 search 1, 7/7/09
K1012- 80 in triangle, *organic material in Obj (retain bag – 22/1/10) 24/7/09
K1261- SSH09 1001, N10, 1971, 350 in triangle, 5/6/09
K1652- BA 1971 SSH09 P9 445 (in triangle) 11/8/09
K5019- 155 in triangle
K5033- 177 in triangle

X-Ray- L71 (2012), L69 (2012), K49- L79, K363/K397- L143, L79 (K616), L79- K535, K1652- L79+LK83, L138- K31, K519- L79, K1158- L79, K139- L79, K1177- L124, K73- L79, K1261- L120, K132, K629- L79

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

Second portion of helmet crest in silver with gilded sections and incised decoration on the side panels. Organic material remains on the surface of the inner tray fragments.

K363+K397 is a Horse head terminal which fits onto one end of the crest.

Associated Objects: Other items of Helmet infrastructure.

Two animal-head terminals: K47+K678; K363+K397(nails)

Two crest parts (Style II): K546 (complete); fragments of second (x23):

K31+K1261+K49+K1158+K1257+K73(x2)+K519+K541+K139+

K616(nail)+K868+K950+K1012+K1177+K1882(x2; renumbered from K397)+K5019+

K1652+K5033+K1973(renumbered from K1347)+K535(nail)+K629

Two cheek-pieces (Style II): K288+K453+K740+K1509; K97/K594/K772/K1223/K5004 (it has not yet been possible to check whether these elements are all from the same cheekpiece)

Pre-Conservation Condition: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

Please see individual reports for each fragments prior condition.

Some dark tarnishing and staining is present on the silver base. Gilding is still fairly intact on the side panel decoration with plait and, on the opposite side, weave decorations. There is some evidence of iron corrosion product around the nail in situ on the end and some of the other empty pin holes.

Organics are present in the tray exhibiting a discoloured brown with black accretions as well as some white (calcium?) deposits. These seem to be primarily around the rivet hole areas.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Display / Study / Analysis

Aim: Cleaning/ Reassembly/ Stabilisation

Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on metals, cotton wool swabs, cocktail stick, Paraloid B72, Reemay Polyester netting 30gsm.

The granular soil on the front/back was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. IMS or water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of IMS.

Corrosion products were left in situ; corrosion was not active and can be further cleaned or stabilised at a later date.

The paper K number was adhered to the back with HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a cocktail stick.

A storage box padded with white polyethylene foam was made for housing the object. A strip of Tyvek (spun bound polyethylene fibres) was used as a cushion for the object and to help lift it out of the foam.

10/12/2015- K. Fuller

Fragments of the crest were carefully pieced together in sections using 40% Paraloid B72 in Acetone. Sections of the side panels and main tray had to be further supported with 20% Paraloid B72 in Acetone over polyester netting. The weight of the item and distortion of the burial has caused further instability in the structure when assembling back together. A custom made but temporary mount had to be made out of plastazote to support the weight and the overall item while it was drying at join edges. Due to this, some of the side panel joins exhibit slight looseness at the adhered edge. It is likely that some of the protruding side panel decoration may become loose.

Areas of organics are not contaminated due to the use of concentrated glue. At break edges, there is more likely to be contamination so therefore be wary of sampling in these areas in future.

The helmet horse head piece is still detached but can be inserted and incorporated into position when mounting.

The item was boxed with all of its samples.

A custom made mount is required to display this safely and accurately.

Post-Conservation Condition/Findings:

Areas near the join unfortunately are exhibiting obvious bits of Paraloid B72 on the surface. However this needs to stay in place so that the item remains stable.

As mentioned about the side panel joined edges are fragile due to the distortion and weight of the item. These will need to be carefully considered when creating a mount.

The item is highly distorted in shape with cracking, breaks and loss to metal fragments. There is still a significant proportion of it remaining however, and the horse end fits comfortably into the narrower side.

An observation was made that with the horse head on one side, the remaining crest side decoration comes to a clear end on the other side. So the crest does not appear to be directly joined to another piece of side decoration. Therefore it likely sits alongside but does not directly join to the other piece of crest.

Key Features:

- Full length of curved crest with horse head fitting into one side and no direct join to other crest.
- Two different schemes of decoration either side.

Analysis Undertaken:

XRF analysis of the object was performed. See document 'KXXX XRF Report'.

Samples:

See individual reports for information

References: