



HISTORIC
ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

Property in Care (PIC) ID:	PIC328
Designations:	Scheduled Monument (SM90074)
Taken into State care:	1925 (Guardianship)
Last Reviewed:	2021

STATEMENT OF SIGNIFICANCE

CLAVA CAIRNS



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HISTORIC ENVIRONMENT SCOTLAND STATEMENT OF SIGNIFICANCE

CLAVA CAIRNS

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Please note, the research for this document was undertaken during 2020-2021 with limited access to archives and resources, as a result of Covid-19. While every attempt was made for accuracy throughout the statement, errors or omissions may remain. Please direct comments or suggestions to CRTenquiries@hes.scot

I. SUMMARY

1.1 Introduction

Set among farmland six miles from Inverness, the HES-managed site known as Clava Cairns forms part of an extensive Bronze Age cemetery that stretches out along a river terrace of the River Nairn. The site dates to around 2000 BC.

Several elements of the wider cemetery site are scheduled monuments and within these several groups of monuments are in State care, comprising bronze age cairns, a standing stone and a chapel site, thought to be medieval.

Clava Cairns forms part of the Culloden Muir Conservation Area as designated by The Highland Council.¹

The property in State care is open to the public all year round and is unstaffed and free to visit. A visitor carpark is situated adjacent to the main site at Balnuaran of Clava.² There are interpretation panels which provide visitors with background information.

Visitor counters were installed in 2019-20 as part of measures to monitor visitor numbers and impact upon the site. Numbers were estimated at over 111,000 in 2019-20 which underlines the importance of the site as a visitor attraction.³ Nearby historic sites include Cawdor Castle and Culloden Battlefield.

1.2 Statement of Significance

Clava Cairns has attracted antiquarian interest since at least the early 1800s. Their prominence and good state of preservation has led to them lending their name to a regionally distinct monument type, now known as

¹ For full details, see: https://www.highland.gov.uk/info/192/planning_-_listed_buildings_and_conservation_areas/167/conservation_areas/3#:~:text=Conservation%20areas%20Culloden%20Muir%20Conservation%20Area%20Under%20the,and%20to%20designate%20such%20areas%20as%20conservation%20areas.

² Please check access information prior to visiting: <https://www.historicenvironment.scot/visit-a-place/places/clava-cairns/getting-here/>

³ Figures courtesy of Historic Environment Scotland.

Clava-type cairns,⁴ found exclusively in the north-east of Scotland around the Moray Firth. This monument group shares architectural affinities with Neolithic monuments, many of which were built and in use around 1000 years earlier such as chambered tombs, stone circles and ring cairns,⁵ though they are unique in their combination of these features.

Much of what we know about the HES-managed site (and this monument type in general), is based on investigations and research undertaken between 1994 and 1996 by Professor Richard Bradley. *The Good Stones: a new investigation of the Clava Cairns* (2000) is a comprehensive account of these archaeological investigations at Balnuaran of Clava and other Clava-type cairns. It also draws together the results of other excavations, both at Balnuaran and elsewhere, and the findings of extensive fieldwork in the landscapes surrounding the cairns.

Bradley's work at Balnuaran of Clava provided the first scientific dates for such monuments. Rather than being Middle to Late Neolithic, as previously assumed, radiocarbon dates from Bradley's investigations indicate that they date from about 2000 cal BC (the Early Bronze Age). His research also indicates the importance of the location and orientation of the monuments and certain astronomical alignments. The cemetery at Balnuaran of Clava was extensively reused and extended in the Late Bronze Age and there is evidence to suggest the wider area remained significant as a sacred landscape for many millennia. Comparisons may be drawn between the linear cemetery at Clava and that in Kilmartin Glen, and both groups of monuments were established at about the same time.^{6 7}

⁴ The name 'Clava cairns' is often used to refer to the site-type, as well as this specific site. Throughout this document, the monument group will be referred to as 'Clava-type cairns' for clarity.

⁵ It is not yet clear whether the construction of ring cairns first began in the Neolithic period.

⁶ The linear cemetery in Kilmartin Glen comprises Glebe Cairn, Nether Largie North Cairn, Nether Largie Mid Cairn, Nether Largie South Cairn, and Ri Cruin - all of which are properties in State care.

⁷ (Richard Bradley, pers comm.)



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*Figure 2: Aerial photograph showing Balnuaran of Clava (Group 1) with adjacent visitor carpark, and agricultural buildings
© Crown Copyright: HES.*

The cultural significance of Clava Cairns can be summarised as follows:

- It is a well preserved and representative example of a regionally distinctive group of Bronze Age monuments; the cairns at Balnuaran of Clava are among the best-preserved examples of this group (in addition to **Corrimony**⁸) and are the type-site from which the group gets its name. It is notable for its group value as an excellent example of a wider monument class, and the potential of this group of monuments as a whole to enhance our understanding of regional identities and cultural differences in Bronze Age Scotland.
- The group of monuments at Clava Cairns display a unique combination of features including a circular cairn with a surrounding platform and ring of standing stones. Their distinctive architectural form and use of raw materials, and the symbolism and meaning imbued in their design is of great value in contributing to our understanding of Bronze Age society.
- It has high intrinsic evidential value for the potential the site has to shed light on past belief systems and ritual and funerary practices during the Early Bronze Age and later. Though areas of the site have been extensively excavated, considerable areas within and around the Guardianship areas remain undisturbed and are likely to be of high archaeological potential. In addition, given the excellent state of preservation, there is still potential to investigate the materials used to construct the cairns, their orientation and astronomical alignments, and their relationship to the wider landscape.
- In addition to this, it allows for visitors to the site to experience and observe the monuments in something of their original form, providing a valuable tangible connection to the past.
- As a PIC (property in State care) and a well-preserved site that is relatively easily accessible by road, it is one of the most visited prehistoric sites in mainland Scotland. Visitor numbers have increased significantly in recent years, as have organised tours to the site, largely owing to the success of the Outlander novels and TV series by Diana Gabaldon. The fictitious stone circle of Craigh na Dun is believed to have been inspired by this site.
- Clava Cairns forms a key part of the wider historic landscape recognised by its Conservation Area designation. Though separated by millennia from the events of the battle of Culloden, Clava's strong

⁸ Throughout the text, site names in **bold** are managed by Historic Environment Scotland and are publicly accessible. Access information can be found at: www.historicenvironment.scot/visit-a-place/; for information specific to Corrimony see: <https://www.historicenvironment.scot/visit-a-place/places/corrimony-chambered-cairn/>

'pull' for visitors today has some resonance with the battlefield as a site of memory and commemoration.

- While the contemporary and social values of the site would benefit from further investigation and a deeper understanding, it is evident that the site is treated with reverence by many who visit. There are anecdotal accounts of groups and individuals visiting for spiritual purposes, especially at key points in the year such as Easter or the midwinter solstice.
- The orientation of the passage graves towards the south-west and their alignment in a valley which runs south-west/north-east is a distinguishing feature, one that is also shared with other Clava-type cairn sites. The precision of the alignment of the cairns at Balnuaran of Clava with the setting of the midwinter sun is particularly notable. This indicates ritual and social connections with seasonal cycles, the changing seasons and the movement of the sun and moon. These cycles were likely to have been symbolic and are thought to have been marked by ceremonies or ritual activity. Clava Cairns therefore has high potential to inform our understanding of prehistoric belief systems and ways of life.
- The excellent degree of survival allows for the interpretation and understanding of the design of these cairns. Their sophisticated use of raw materials, carefully designed form, and the deliberate incorporation of earlier rock art provides a valuable insight into Bronze Age belief systems, symbolism and cultural practices.
- The chapel at Milton of Clava has not been thoroughly investigated and has not attracted the attention that the rest of the property in State care has. It may be of high evidential and historical value, and its relationship to the prehistoric cemetery merits attention.
- A rich history of antiquarian and archaeological investigation at the site and the excellent archival record associated with this, further adds to the evidential values of the property.

2. ASSESSMENT OF VALUES

2.1 Background

The monuments which make up the wider site at Clava have been studied and recorded since the 19th century, right up to the present day. There is therefore a considerable body of literature and a system of identifying the various elements has evolved over time. This identifies 5 groups of monuments, we have chosen to retain this naming system to make cross

reference with major published accounts of the site easier for the reader. The five groups are:

- Group 1: two passage graves, a ring cairn and a kerb cairn, collectively referred to as the Balnuaran of Clava group;
- Group 2: a cairn and monolith at Milton of Clava;
- Group 3: a monolith at Mains of Clava NW;
- Group 4: a partial ring cairn at Mains of Clava SE;
- Group 5: the remains of a chapel.

Groups 1, 2 and 5 are the main elements of the area in State care where public access and interpretation are provided and are described in detail below.

2.1.1 Balnuaran of Clava (Group 1)

Elements of this complex which are in State care comprise:

- The north-east cairn
- The central ring cairn
- The south-west cairn
- The kerb cairn

The north-east cairn comprises a well-preserved passage grave with overall form and dimensions closely paralleling the south-west passage grave, though each has distinctive elements in their design which emphasise their alignment and hint at their use. Both have sub-circular chambers, with entrance passages aligned towards the south-west at the point the setting midwinter sun meets the horizon; the passage of the north-east cairn is also aligned to face the south-west cairn. The core of the cairn is of rubble construction, faced with an inner and outer ring of upright kerbstones, graded in height with the tallest at the entrance in the southern arc. Abutting and partially obscuring the outer kerbstones is a low, earth and stone platform. Beyond this is another concentric ring of 11 standing stones, though there may originally have been 12; at least three of these stones have been re-erected (see Figure 10).⁹ The tallest standing stones are adjacent to the entrance; one just outside the entrance may have been re-erected in the wrong position, possibly upside down, in the 1880s.

The same raw materials are used for each of the cairns, all of which could have been locally sourced. There appears to have been deliberate use of stones of different geology, colour and size, the use of which is likely to be more symbolic than functional in places (see sections 2.4 Architectural and

⁹ (Bradley, 2000, pp. 32-3; Fraser, 1884, pp. 346-8; Fig 12)

artistic values and Appendix 2: Additional background information). The materials include a mix of river-worn pebbles, quarried red sandstone slabs, and glacial erratics (of mixed geology, including banded gneiss and conglomerates).

The central chamber is open to the sky today but would probably have originally had a corbelled roof.¹⁰ The central chamber of the north-east cairn survives to a greater degree than that of the south-west cairn, and it is slightly larger in size. The basal course of stones defining the central chamber are upright monoliths, with drystone rubble courses of stones above.



Figure 3. North-east cairn prior to clearance works, 1924 © Crown Copyright: HES.

¹⁰ (Bradley, 2000, pp. 46-7; Innes, 1858)

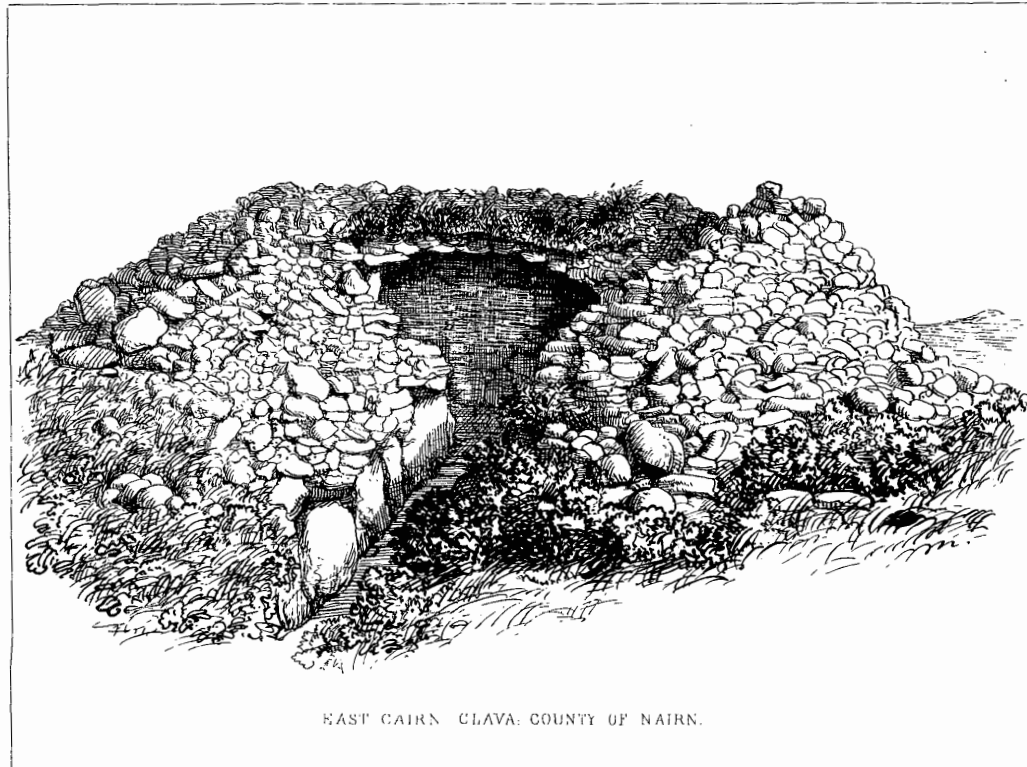


Figure 4. Illustration in Cosmo Innes account of the Clava Cairns, showing the north-east cairn at a greater height than present, with possible hints of corbelling over the central chamber (Innes 1858). © Society of Antiquaries of Scotland, reproduced with kind permission.

The **central ring cairn** lies between the two passage graves, at the centre of the site. It is formed of a circular, rubble cairn contained within inner and outer kerbs of upright monoliths that are in turn surrounded by a low, earth and stone platform. The cairn itself is surrounded by a ring of nine standing stones (originally there were probably 11; three were re-erected in 19th century); three of these are linked to the outer kerb by stone banks (see Figure 12).¹¹ The stump of a tenth stone was revealed through visitor erosion and recorded in 1995. At the junction of one of the banks with the ring cairn are two cup-marked kerbstones. There is evidence of stone robbing of cairn material and kerbstones, particularly on the south-west arc of the outer kerb. The inner kerb is thought to be largely intact and relatively undisturbed by recent interventions. The tops of the kerbstones lean slightly into the open chamber. There is no evidence to suggest that the chamber ever had an entrance passage or that it was roofed. The interior was filled-in during a secondary phase (presumably during the Bronze Age) but was cleared out in an unrecorded excavation. The original

¹¹ (Bradley, 2000, pp. 18-20; illus 13; Fraser, 1884, pp. 348-9). These three, linear banks radiate outwards, and are labelled as 'causeways' in Figures 7 & 12 below, or 'rays' in Figure 13.

structure of the ring cairn is partly masked by the spoil removed during that work.¹²



Figure 5: Photograph of the central ring cairn and surrounding monoliths, taken 2015. © Historic Environment Scotland

The **south-west cairn** is similar to the north-east passage grave, with the same key components. The outer kerb of the south-west passage grave was originally intended to lean back into the body of cairn. Evidence of corbelling of the central chamber survives, supporting the theory that both passage graves were originally roofed.¹³ Two other notable features may have existed, but no longer survive today. The first is a possible stone-built porch; two rows of parallel stones are depicted on Somerville's 1910 plan, extending along the same line as the entrance passage, beyond the outer kerb, though no trace survives.¹⁴ The second is the flattened appearance of the outer kerb and surrounding platform on the south-west arc, which could indicate there was once a forecourt area; again, this feature has been lost through subsequent interventions, most likely the reconstruction and improvement work in the 1930s. Of the 12 original monoliths surrounding the cairn, 11 survive (two were removed in 1870 when the earlier road was

¹² (Richard Bradley, pers comm.)

¹³ Though Henshall and Ritchie (2001) are cautious in their interpretation of any possible roofing.

¹⁴ (Bradley, 2000, pp. 24-5; illus 21)

relocated; three have been re-erected). Several of the kerb stones bear cup or cup-and-ring marks.

The **kerb cairn** is in poorer condition than the other, larger cairns. The present remains comprise a ring of 15 kerbstones which have been disturbed by tree roots. It was excavated by Piggott in 1953; his investigations indicated a possible grave hollow at the centre.¹⁵ Despite the modest nature of the cairn, there is still attention to detail in its design, including the use of monoliths of graded height, with the tallest on the south-west arc. On the eastern side is a larger, flatter slab of red sandstone with cup-and-ring marks on its surface. The flattened form of this and the adjacent stone to the west have been interpreted as forming a symbolic and physical threshold.¹⁶

The sum of numerous investigations and surveys since the 1800s, and Bradley's comprehensive research and synthesis allows us to appreciate these monuments in much greater detail. The seemingly simple forms belie complex details and unusual construction techniques, particularly in the two passage graves.

2.1.2 Milton of Clava Cairn and Monolith (Group 2)

Prior to excavation in 1990, this monument comprised a roughly rectangular cairn measuring 10 by 6m with a large standing stone about 3m from its south-west corner. A substantial grass-covered mound extended to the south and east. Limited excavation was undertaken by Historic Scotland to establish the nature of the monument.¹⁷ One stone was found to be peck-marked. The results support the widely held opinion that this is a badly robbed tomb of the Clava type (about 12m diameter) overlain by a more recent rectangular cairn, seemingly composed of field clearance. Interpretation of the remains, however, is problematic. No stratified deposits were disturbed and there was no dating evidence. All that remains visible is the low, stony remains of the cairn, partially turf-covered, and the monolith.

Henshall stated there was nothing visible at the time of her fieldwork in 1958, though there were traces of stones that indicate a possible Clava-type cairn within and around the chapel site.

2.1.3 Milton of Clava Chapel site (Group 5)

¹⁵ (Piggott, 1956)

¹⁶ (Bradley, 2000, p. 38)

¹⁷ (Sharples, 1993)

Low, turf-covered stone foundations of a small rectangular building thought to be an early Christian chapel. The site was reported by Bain as being a Columban chapel (early Christian), believed to be dedicated to St Dorothy, though others have since suggested it was dedicated to St Bridget.¹⁸ Previous accounts suggest that this may partially overlie the remains of a Clava-type cairn but more recently this suggestion has been dismissed.¹⁹ Fraser's description of the 'ancient chapel' site implies that the remains were more easily discernible at the time of his survey, with evidence for a doorway opening on the south-east side.²⁰ The chapel was noted as being within a rectangular, stone enclosure, known locally to have been used as a burial ground. It is unclear whether this information is taken from Innes's earlier account, where he claims the enclosure was used for the burial of unbaptised children, within living memory.²¹



Figure 6. Aerial photograph of Milton of Clava chapel, enclosure and ring cairn © Crown Copyright: HES.

2.1.4 Monolith at Mains of Clava, NW (Group 3)

A single but substantial standing stone situated to the north-east of Balnuaran of Clava, at Mains of Clava North-West. Described in 1884 as the

¹⁸ (NSA, 1845; Trevarthen & Jackson, 1997)

¹⁹ (Henshall & Ritchie, *The Chambered Cairns of the Central Highlands*, 2001, p. 242)

²⁰ (Fraser, 1884, p. 341)

²¹ (Innes, 1858; NSA, 1845)

remains of a stone circle, it is assumed to be the scant remains of another Clava-type cairn, forming part of the cemetery.²² Limited results from geophysical survey in the 1990s indicated this is likely to be all that survives of another Clava cairn, possibly of the same size as the passage graves to the south-west. The surviving monolith may have been one of the tallest surrounding stones, on the south-west arc of the circle surrounding the cairn.

The site is included within the guardianship agreement but is not advertised or presented to the public.

2.1.5 Partial ring cairn at Mains of Clava SE (Group 4)

Fragmentary remains of a ring cairn at Mains of Clava South-East, visible as a low mound of rubble approximately 19m in diameter. Bradley cleared the vegetation and undertook topographical and geophysical survey, largely confirming Fraser's interpretation and plans over a century earlier.²³ Two arcs of upright kerbstones were visible, forming the inner kerb the monument; no trace of an outer kerb was visible.

The site is included within the guardianship agreement but is not advertised or presented to the public.

For full details of the scheduled site, which encompasses elements outwith the Guardianship area, see:

- (SM90074) Cairns, barrow and standing stones north-east of Balnuaran²⁴
- (SM13650) Cairn, south-south-west of Milton of Clava²⁵
- (SM13652) Chapel and standing stone, south-south-west of Milton of Clava²⁶

Further information can also be found on Canmore, see sites [NH74SE 4](#), [NH74SE 3](#), [NH74SE 1](#), [NH74SE 10](#), [NH74SE 6](#), [NH74SE 7](#).

2.1.6 Chronological overview

Early Bronze Age

²² (Fraser, 1884, p. 350; Henshall A. S., 1963; Bradley, 2000, pp. 41-2)

²³ (Bradley, 2000, pp. 39-40; Fraser, 1884)

²⁴ <http://portal.historicenvironment.scot/designation/SM90074>

²⁵ <http://portal.historicenvironment.scot/designation/SM13650>

²⁶ <http://portal.historicenvironment.scot/designation/SM13652>

The passage graves were once thought to be Neolithic, but Bradley's investigations at Balnuaran of Clava confirmed that they date from around 2000 cal BC. Archaeological evidence indicates that the whole cemetery was planned as a single design and constructed over a relatively short period of time.

Alignment of the passage grave entrances on the setting of the midwinter sun indicates that a significant degree of planning, over a protracted period (several years at least), must have gone into the design and construction of these monuments. Archaeological evidence at this site, and at Raigmore,²⁷ has revealed evidence for earlier human activity in the immediate vicinity of the cairns, suggesting that they were built in landscapes where communities were already well established.

Late Bronze Age

There was extensive reuse of the site in the Late Bronze Age (around 1000-800 cal BC) and the cemetery area was enlarged. The chamber floor of the south-west cairn was removed, and a deposit of charcoal added. Two urns and fragments of cremated human bone found during 1828 excavations may date to this secondary phase of activity.²⁸ The small kerb cairn probably belongs to this period. The secondary elements of the Balnuaran of Clava cemetery, such as the smaller ring cairns and 'satellite' cairns in the wider landscape, are simpler in appearance and construction and appear to relate to this later phase of development.²⁹

1st millennium AD

A cremation burial was placed outside the central ring cairn in the early historic period. Radiocarbon dating revealed that the central ring cairn was reused again in the early historic period.³⁰

1800s

The site has attracted considerable antiquarian interest from at least the early 1800s. The key records and investigations into the site are as follows:

- | | |
|-----------------|--|
| c.1828-9 | A poorly recorded excavation into south-west passage grave by Mrs Campbell of Kilravock; discovery of two incomplete urns and probable cremated human remains. |
|-----------------|--|

²⁷ (Bradley, 2000, pp. 168-70)

²⁸ (Lauder, 1830, pp. 15-17)

²⁹ (Bradley, 2000, pp. 14-15, illus 10)

³⁰ (Bradley, 2000, pp. 56-8, illus 63)

- 1881 - Jolly** Valuable gazetteer of cup-marked stones around Inverness. Provides detailed accounts of the presence and survival at Clava Cairns.
- 1883 - Fraser** Survey, descriptive notes and drawn plans of the 'stone circles' of Strathnairn - a valuable and high-quality record of the extant cairns, their condition and form at the time.

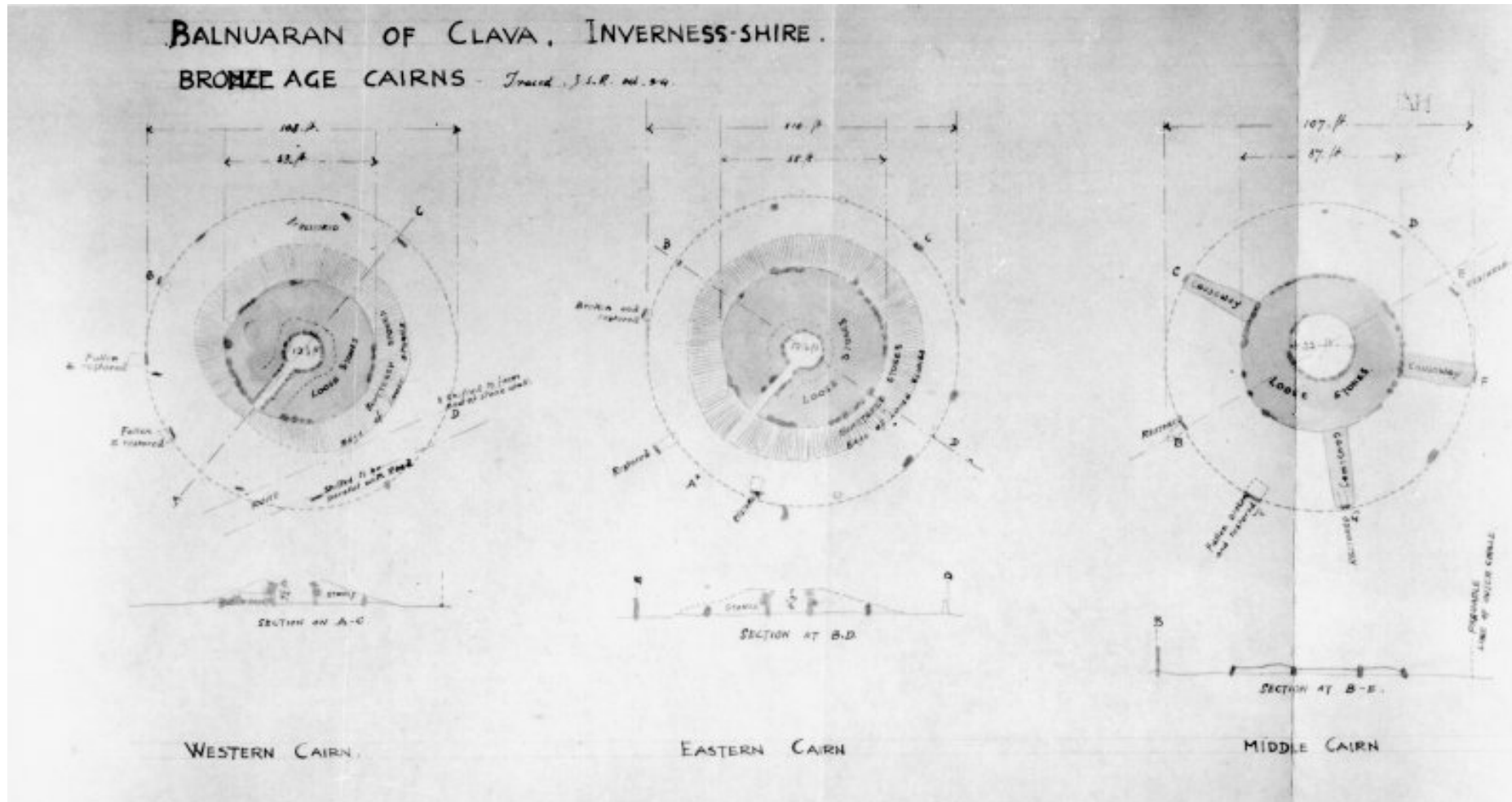


Figure 7. Ministry of Works plan c. 1931 indicating condition of cairns at Balnuaran at the time they came into care, including notes of fallen, restored and loose stones © Crown Copyright: HES.

2.1.7 Research and investigation

In addition to the antiquarian investigations noted above, four key interventions took place during the 20th century that transformed our understanding of this site, and the class of monument, and saw the clearance and improvement of Balnuaran of Clava for public presentation. The site came into Guardianship on 1 June 1925.

Kennedy's Excavation, 1930-1

Shortly after the monument was taken into Guardianship, Katherine Kennedy undertook work to clear vegetation and debris, carry out small-scale excavations, and minor work to support improvements to the presentation of the cairns. Details of this work and findings from the excavations are discussed in a paper by Gordon Barclay (see also Figure 7 above).³¹

Piggott's Excavation, 1953

Professor Stuart Piggott conducted small-scale excavations at Balnuaran of Clava in 1953 as part of a wider project aimed at better understanding Clava-type cairns. The focus of his research was at **Corrimony**, as one of the best examples of a passage grave Clava cairn. His work marked an important development in our understanding of this monument class and was the first scientific investigation at a Clava-type monument.

Piggott's excavations at Balnuaran, and their wider impact, were limited. He excavated the central ring cairn, as there had been no previous recorded investigations into this type of Clava cairn, and the small kerb cairn (which Piggott refers to as a stone circle).³² Within the central cairn, Piggott cleared out the central chamber, and opened two small trenches around the outside of the cairn; one against the outer kerb, the other at the point at which one of the radial banks meets the surrounding monoliths (see Figure 8). Charcoal and a scatter of human remains were found, providing tentative evidence for funerary practices, but his investigations revealed the central chamber had been heavily disturbed at some point in the past. The excavations did shed some light on the make-up and construction of the cairn, particularly of the radial earthworks or 'causeway'. No scientific dates or detailed stratigraphic information was recovered to enable a better understanding of the development sequence.³³ The interior of the small kerb cairn was extensively excavated (see Figure 9), within it was evidence for a shallow grave – interpreted by Piggott as being a single inhumation burial – and a deposit of white quartz pebbles.

³¹ (Barclay G. , 1990)

³² (Piggott, 1956, pp. 188-90)

³³ Radiocarbon dating had not developed in 1953, and the charcoal was not retained (information from Stuart Piggott, via Richard Bradley pers comm.).

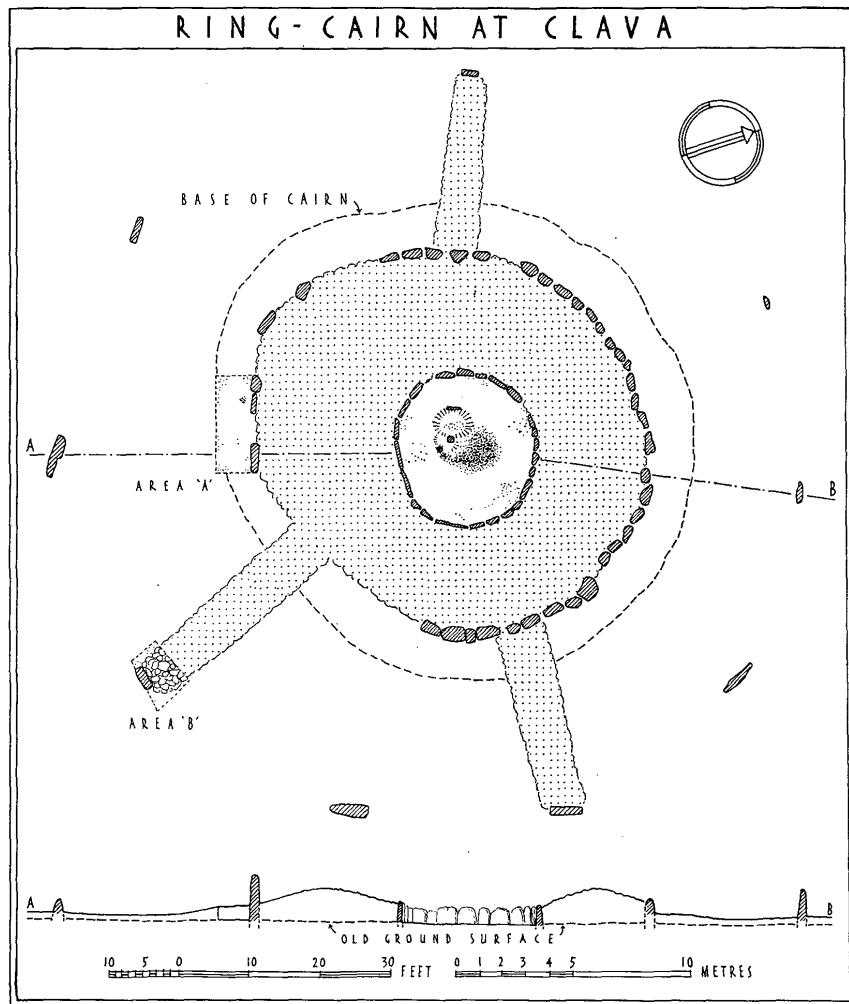


Figure 8: Plan of the central ring cairn at Balnuaran indicating areas excavated by Piggott (Piggott 1956)

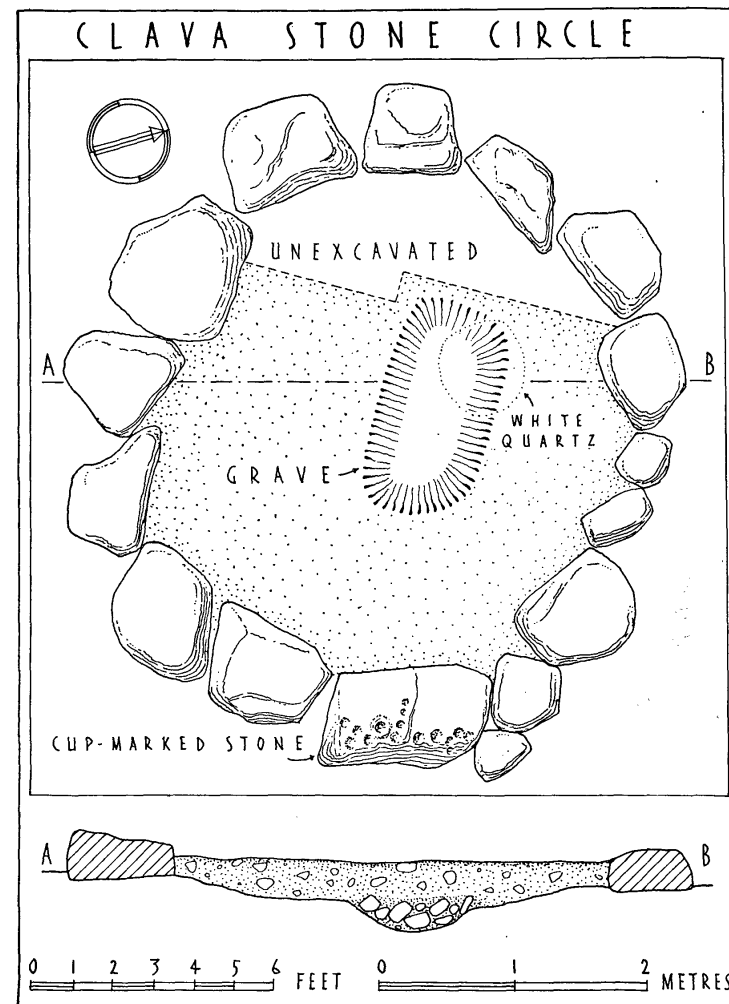


Figure 9: Plan of smaller kerb cairn at Balnuaran of Clava, as excavated by Piggott (Piggott 1956)

Both images © Society of Antiquaries of Scotland, reproduced with kind permission.

Excavations at Milton of Clava

Small-scale investigations were undertaken in the 1990s to ascertain the nature of the monument at Milton of Clava. Although limited, it confirmed that this was a probable Clava-type ring cairn.³⁴

Bradley's Excavations 1994-6

Professor Richard Bradley conducted survey and excavation work at Balnuaran of Clava, and landscape studies of a wider group of Clava-type cairns. Bradley's work provided the first scientific dates for Clava Cairns, identifying them as Early Bronze Age as opposed to Neolithic. It is the only study to date which considers the landscape setting of Clava Cairns and the significance of this in any depth. This research represents the most comprehensive study of Clava-type cairns to date.

Most recently, the cairns have been surveyed by Henshall and Ritchie.³⁵

2.2 Evidential values

The only evidence we have for prehistoric society and culture comes from the physical remains that survive. Our understanding of millennia of prehistoric culture and society is therefore based solely on interpretations of these physical remains.

The primary evidential values of Clava Cairns can be summarised as:

- Its physical fabric and setting: the cairns at Balnuaran are the best-preserved examples of the Clava group and combine all elements common to Clava-type cairns. As such, they allow for future investigation and analysis through observation, survey and recording and retain high evidential value that is virtually unparalleled among other Clava-type cairns.
- The high potential that further archaeological study would yield more information, both from the area in State care, and in the surrounding landscape.
- The quality of research available upon which to base an understanding of the Clava Cairns is good, with high potential to improve with further research. Excellent archival evidence in the form of plans, drawings and photographs enables us to understand the nature of what survives today and its integrity.
- Research to date has proved that in design, form and function the Clava-type cairns are distinctly different to other passage grave types such as Orkney-Cromarty cairns. The well-preserved group

³⁴ (Sharples, 1993)

³⁵ (Henshall and Ritchie 2001; for descriptions and plans see INV 8, 9, 10 and 44, pp. 198-210, 242; further discussion of Balnuaran of Clava on pp. 80-95 and 116-25).

of monuments at Balnuaran of Clava and the various investigations at this site over the last two centuries makes a significant contribution to this understanding.

Physical fabric

The well preserved remains at Balnuaran of Clava are significant for the evidence they can provide for prehistoric society. The high archaeological value of the site is demonstrated through considerable antiquarian and later interest in the monument, including modern investigations by Piggott and Bradley.³⁶ Despite previous interventions, there remains considerable potential for the monument to yield further information about the construction, use and function of the cairns, the prehistoric landscape and Bronze Age society in general. The contribution this site makes towards our understanding of Bronze Age society is drawn out in detail in section 2.3 Historical values.

As some of the best preserved Clava-type cairns, this site provides high evidential value in terms of allowing for interpretation of the design, form and construction of these monuments. This is evident in the results of Bradley's research, as he was able to discern deliberate patterns in the use of stone types, sizes and colour within each of the cairns. There is clear evidence for careful planning and construction of these cairns, and significant portions survive to allow visitors or researchers to appreciate something of their original form and setting. Significantly, it is still possible to experience the monuments and observe their alignment with the midwinter setting sun, and to investigate other astronomical alignments. For further discussion of their architectural and artistic value see section

Evidence revealed by archaeological investigation

Despite a significant amount of interest in the site from an early date by antiquarians and archaeologists, excavations into and around the cairns at Balnuaran has been relatively limited in terms of area and extent. Furthermore, few other Clava-type sites have been thoroughly investigated. Piggott's work at **Corrimony** in the 1950s remains one of the most comprehensive excavations, along with those at Newton of Petty, Raigmore and to a lesser extent the ring cairn at Culdoich.³⁷

Poorly recorded excavations by Mrs Campbell of Kilravock in 1828 revealed evidence for the remains of cremation burials within the central chamber of the south-west cairn or probable Late Bronze Age date.³⁸ Although the work was not carried out to the standards we would expect today, the

³⁶ (Bradley, 2000; Piggott, 1956)

³⁷ (Bradley, 2000, pp. 131-59; 168-9); see Canmore sites [NH74NW 14](#), [NH64NE 6](#) and [NH74SE 2](#) respectively.

³⁸ (Bradley, 2000, p. 129; Lauder, 1830)

record and illustrations of the finds provide a valuable contribution to our understanding of the site. Work undertaken by Kennedy in 1930-31 (written up by Barclay³⁹) and the surviving archival record are valuable in providing evidence of the condition of the monument and the extent to which it had deteriorated and been altered over the course of the previous century or more. Meanwhile, Piggott's excavations around the central ring cairn and small kerb cairn shed light on the construction, development and use of these elements of the cemetery. His research at Clava was relatively limited compared to his findings from **Corrimony**, nevertheless his research greatly added to our understanding of this monument class and demonstrated their high evidential value.

Bradley's work is undoubtedly the biggest contribution towards our understanding of this specific site, and to the monument-type in general. The archival research, archaeological excavation, survey and recording undertaken in the 1990s, combined with a synthesis of previous excavations at other sites (including previously unpublished work) provides the most comprehensive and up-to-date analysis of Clava Cairns. Balnuaran of Clava formed the focus of his investigations and the impact of this work clearly demonstrates the archaeological potential and evidential value of the site for its contribution towards understanding these monuments, their construction, date, and function. Through excavations into the three main cairns at Balnuaran, and a smaller ring cairn to the south of the Guardianship area, Bradley established a sequence of structural development for the cairns and the cemetery they form. Excavation of the central ring cairn and radial banks confirmed that the platform, rays and surrounding stone circle were of a single build. The same is true for the passage graves, suggesting they were designed and built over a relatively short period of time. The detailed planning, alignment and use of materials suggests they were constructed in already inhabited landscapes; palaeoenvironmental evidence from these excavations further supports this, demonstrating that the landscape was cleared and at least partially cultivated prior to construction of the cairns.⁴⁰

Crucially, Bradley's excavations produced a series of reliable radiocarbon dates from Balnuaran of Clava. These dates confirmed that Clava Cairns are of Bronze Age date and therefore part of a separate cultural tradition to the passage graves found elsewhere in Britain and Ireland which date to the Neolithic. This evidence over-turned many previous debates about the origin, development and function of Clava-type cairns and has allowed for new consideration of how the monuments were used and why, and their significance within the Bronze Age society. Radiocarbon dates, combined with renewed stratigraphic analysis of the cairns at Balnuaran of Clava allowed Bradley to determine a refined development sequence for the cairns and the cemetery, as well as identifying periods of later reuse and

³⁹ (Barclay G. , 1990)

⁴⁰ (Bradley, 2000, pp. 89-96)

alteration. A total of 23 dates were obtained, with two clear clusters around the late 3rd and early 2nd millennia BC, and in the latter half of the 2nd millennium BC. Radiocarbon dates support the interpretation of the site and its individual elements all being constructed over relatively short period of time, with reuse and extension in the Late Bronze Age.⁴¹ Bradley's excavations also revealed evidence for a much later burial, probably Pictish, outside of the central ring cairn, with radiocarbon dates in the later 1st millennium AD.

Though the material assemblage associated with Clava-type monuments is relatively limited, the artefactual evidence still has value in adding to our understanding of Bronze Age society. Consistent discoveries of cremation deposits, flakes of worked flint and quartz, seashells, and other quartz deposits provide valuable evidence for probable ritual activity. Bradley's research indicates that these materials had been deliberately brought to the site and deposited on the rubble platforms. Evidence for burials at Clava-type cairns is limited and mixed, though sufficient data has been gathered to allow for osteological analysis of remains from Balnuaran and Newton of Petty.⁴² This suggests that Clava-type cairns were intended for only one or two individuals, that both inhumation and cremation was practiced, and that the burials were primarily adults.⁴³ At Balnuaran of Clava, all evidence points towards cremation as the predominant funerary practice. However some, if not all, of the excavated cremation deposits may relate to Late Bronze Age activity rather than primary deposits; a sequence that seems increasingly likely in light of other fieldwork in the north of Scotland.⁴⁴ There may be potential for further scientific analysis of previously excavated human remains, or of any newly discovered cremation deposits, using new and refined techniques which could allow us to obtain more detailed information about cremation practices, demography and palaeopathology of the communities that built and were buried in these monuments. The ways in which this evidence contributes towards our understanding of Bronze Age society, belief systems and practices is discussed in more detail in section 2.3 Historical values.

Rock art

As with many Clava-type sites, these cairns incorporate stones with cup-marks and cup-and-ring marks. There are numerous records of these decorated stones and many of the markings are still visible today. Some cup-marked slabs were decorated before the corbels were constructed, but the motifs on two kerbstones and the decorated upright where the

⁴¹ (Bradley, 2000, pp. 115-20)

⁴² (Bradley, 2000, pp. 87-89; 145; 165)

⁴³ The most substantial evidence for a primary burial comes from Piggott's excavations at Corrimony, which revealed very fragmentary evidence for a single crouched inhumation in the central chamber (Piggott, 1956, pp. 182-3; 200-4). Bradley summarises evidence, mostly for cremation burials, from other sites (Bradley 2000, 165).

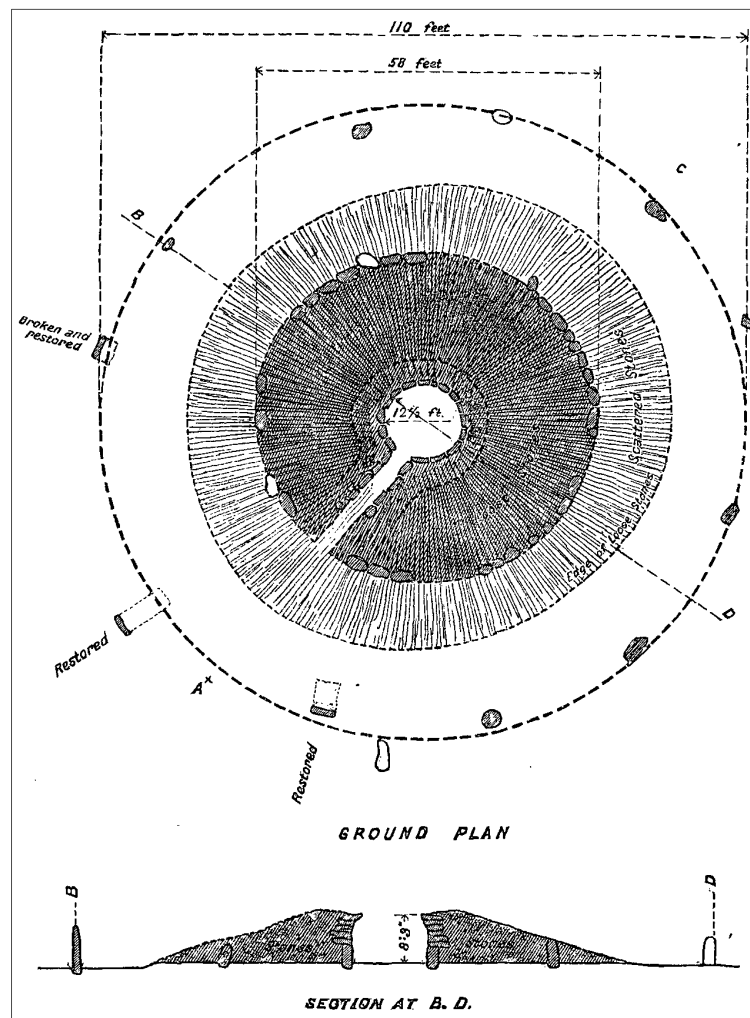
⁴⁴ (Richard Bradley, pers comm.)

passage meets the chamber of the south-west cairn, were probably embellished when the tombs were built. The designs appear to be fitted to the shape of the stone.⁴⁵

Clava-type monuments appear to be unique in Scotland for the inclusion of cup-and-ring motifs within passage graves.⁴⁶ These examples contribute towards a much wider corpus of Scottish rock art⁴⁷ and though the meaning of such motifs and their inclusion within these sites is far from clearly understood, their survival allows for investigation and analysis towards a better understanding of prehistoric society.

Documentary evidence

Figure 10. Early plan by Fraser showing north-east passage grave, with indication of recently restored stones (Fraser, 1884). © Society of Antiquaries of Scotland, reproduced with kind permission.



⁴⁵ (Richard Bradley, pers comm.)

⁴⁶ (Bradley 2000, 218)

⁴⁷ For further information, see the Scotland's Rock Art project website at: <https://www.rockart.scot/index.cfm>

Balnuaran of Clava has received considerable interest from antiquarians and archaeologists since at least the early 1800s; there is a wealth of information on this monument type that has been revealed largely as a result of studies of this specific site. The survival of and ability to access detailed high quality plans and drawings spanning from the early 1800s to the present day and historic photographs documenting the site prior to coming into State care, or episodes of excavation and consolidation, allow us to determine how the monument has changed over time and to understand its authenticity, integrity and evidential value. Early illustrations, by Innes for example, provide a glimpse of the cairns in a much more complete form, with possible evidence for corbelling of the central chambers.⁴⁸ The excellent record made by Somerville – and largely unknown until Bradley’s research – may comprise the only surviving evidence of a possible stone ‘porch’ at the entrance to the south-west passage grave.⁴⁹ The rich archival record associated with these numerous investigations is of high evidential value in itself, and crucial in informing our understanding of these monuments.

⁴⁸ (Innes, 1858)

⁴⁹ (Bradley, 2000, pp. 9-12; 24, illus 21; 32-3 illus 32)

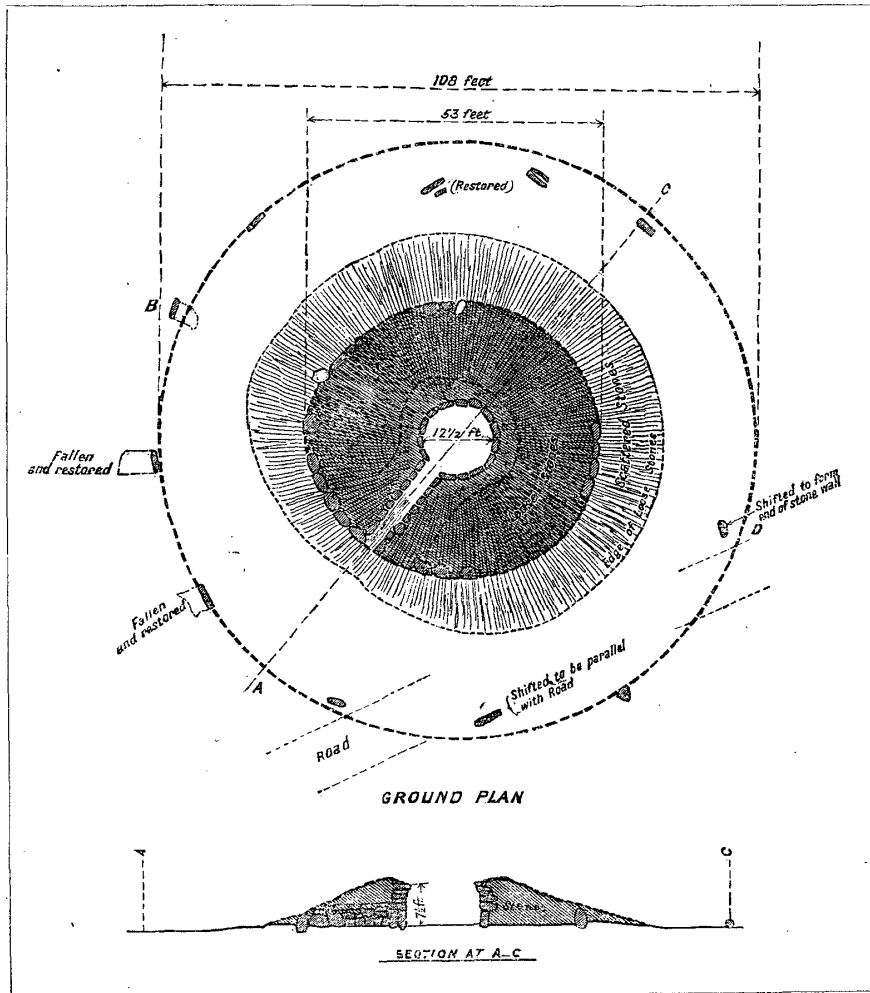


Figure 12: Early plan by Fraser showing central ring cairn, with indication of recently restored stones (Fraser, 1884).

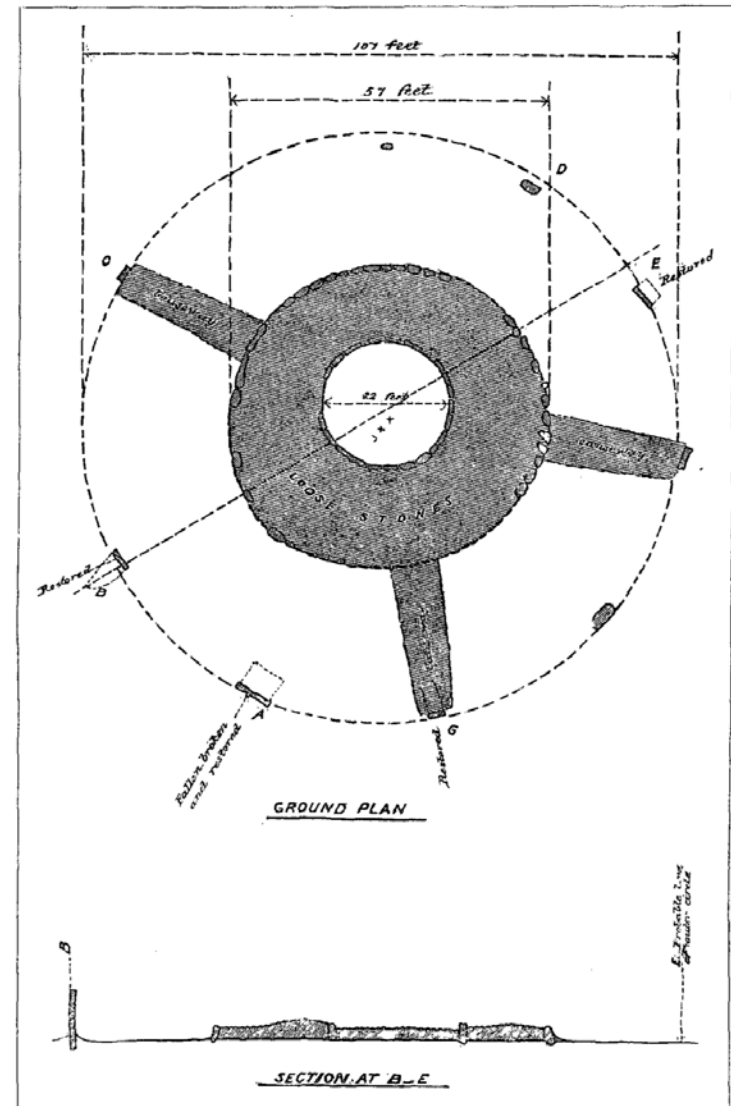


Figure 11: Early plan by Fraser showing south-west passage grave, with indication of recently restored stones (Fraser, 1884).

Both images © Society of Antiquaries of Scotland, reproduced with kind permission.

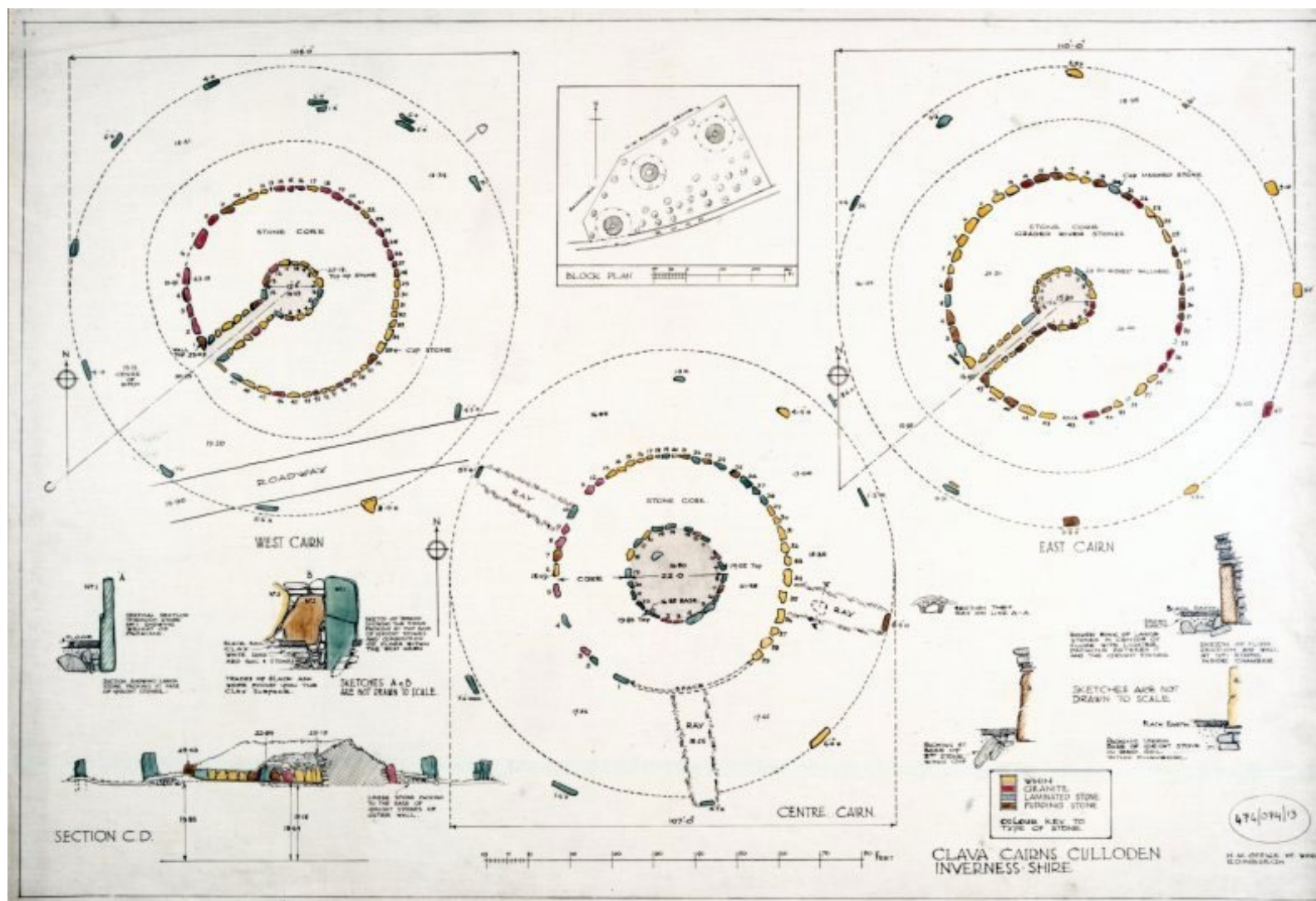


Figure 2: Ministry of Works colour drawing of the three cairns at Balnuaran, with notes on condition (c. 1930s).
 Historic Environment Scotland.

©

Further research potential

The degree of completeness of the monument provides further opportunity to investigate the design and construction of the monument and the materials used. It also offers the potential to observe and record the orientation and alignment of the cairns and to further investigate this aspect of its significance, including its relationship with the solar and lunar cycles (see section 2.3 for further information on the significance of these associations).⁵⁰

Although there have been numerous interventions in the past, large parts of the area in Guardianship remain unexcavated and are likely to retain high archaeological potential, in particular the area around the chapel and ring cairn at Milton of Clava, and the area below the cairns at Balnuaran, and the ground between each of the cairns. There also remains the potential to obtain further dating and palaeoenvironmental data, and for more in-depth analysis of cremation deposits and the evidence for cremation practices. Bradley's investigations demonstrated the value of lichen growth as an aid to understanding the condition and development of the monument, and its more recent transformations. Lichen should therefore also be considered an important element of the evidential potential of the site.

There is potentially high archaeological value in the area of the chapel and surrounding enclosure at Milton of Clava. There are no records of previous excavations here and as such the enclosed area, footings of the small chapel and associated archaeological deposits may survive reasonably intact. The chapel is thought to be early Christian in date and the site may yield evidence for its origins and subsequent development from the 7th century AD onwards, though this could only be proven through archaeological excavation. There is also potential for the survival of human burials and artefactual evidence. As potentially one of the few known early Christian sites in the area adds to its evidential value as a relatively rare example of early Christian activity in this region of Scotland, especially so if it was a stone-built chapel.⁵¹ The remains have the potential to shed light on the emergence and development of early Christianity in north-east Scotland, and may also enhance our understanding of the sacred significance of this landscape and its reuse (and the cultural significance of such reuse) over many millennia.

The monument is subject to increasing pressures due to rising visitor numbers, potentially exacerbated by increasingly wet weather as a result of climate change. Furthermore, much of the area in Guardianship has suffered disturbance from tree roots and the growth of other vegetation.

⁵⁰ Estaroth's recent work highlights the strong research potential for renewed observation and investigation of alignments at Balnuaran of Clava. (Estaroth, 2018).

⁵¹ (Foster, 2011)

All these factors will have impacted upon the archaeological potential of the site, and visitor erosion in particular poses a risk to loss of archaeological deposits. However, the site remains a well-preserved example with very high archaeological potential.

2.3 Historical values

The primary historical values of the Clava Cairns lies in their ability to demonstrate past ways of life and society, specifically Bronze Age society, its structure, beliefs, ritual and funerary practices.

A further set of historical values lies in its association with the increasing interest and scientific approach to archaeological monuments in the 19th and 20th centuries.

Clava Cairns demonstrates the following themes particularly strongly:

- Burial rites and funerary practices
- Ceremonies and belief systems
- Bronze Age society in general
- Antiquarian and later archaeological study - long-attracted interest; women in archaeology
- Long-term use of ceremonial/sacred landscapes
- Early Christian activity and the establishment of Christianity and places of worship in northern Scotland

Burial rites and funerary practices

One of the primary functions of the Clava Cairns is a place of burial, though the evidence for this is far from straightforward. From the limited burial evidence associated with Clava-type cairns (largely from **Corrimony**, Newton of Petty, Kinchyle of Dores, and Balnuaran), it seems that these Early Bronze Age monuments were designed and built for a single individual who was placed in the central chamber - in stark contrast to earlier passage graves which often held multiple individuals. Evidence from Balnuaran of Clava and other sites indicates that additional cremation burials were inserted into the cairns long after this initial episode of activity. Evidence for the use of both inhumation and cremation practices could perhaps suggest that the funerary activities were themselves not as important as the significance attached to the place of burial, but again much more research is needed into this monument type and the sequencing of burials before such arguments can be made.

The construction of Clava cairn monuments within a tightly defined geographical area suggests well-established belief systems, shared by a regional group. The ways in which Clava-type cairns differ from other ritual and funerary monuments of the Neolithic and Early Bronze Age may be indicative of changing beliefs and practices in the Early Bronze Age. Bradley notes the ‘striking contrast between the number of people needed to build these cairns and the number of individuals who were buried there’ suggesting that the individuals selected for burial may have had a special status.⁵² However, while the use of these monuments for single burials suggests a shift towards a focus on the individual, their architecture and the apparent wider ritual function of these monuments hints at greater inclusion of community in the use and experience of the monument after the initial burial.⁵³

Analysis of cremation deposits and palaeoenvironmental data from these monuments could shed further light on the rituals and funerary activity that took place and the symbolism and meanings attached to these practices.

Ceremonies and belief systems

One of the most distinguishing features of the monuments at Clava is the alignment of the two passage graves on the setting of the midwinter sun. Considerable planning must have gone into the design and construction of these cairns to create such an alignment. This not only suggests that the area was occupied prior to the cairn’s construction, but also that this was a significant seasonal event for those who built the cairn. Evidence from this site and other Clava-type cairns strongly suggests that these monuments were not just places of burial but were intimately linked with seasonal cycles, and symbolic life cycles, and were likely important places for ceremonial gatherings and ritual activity.⁵⁴

The marking of key points in the year, such as midwinter, is evident in a range of monuments from the Late Neolithic and Early Bronze Age. Midwinter, and the shortest day of the year, would undoubtedly have been a significant point in the calendar for Bronze Age farming communities who relied upon the land and were governed by the seasons. There may have been gatherings or ceremonial activities at the site at other key points in the year too. It is evident that the passage graves at Balnuaran of Clava

⁵² (Bradley, 2000, p. 165)

⁵³ (Bradley, 2000) (McCarthy, 1996)

⁵⁴ Bradley (2016) has suggested that Bronze Age ritual and funerary sites such as Clava-type cairns and recumbent stone circles were oriented towards the ‘dark side of the sky’ and indicate associations with the sunset and world of the dead, conversely Bronze Age roundhouses tend to be oriented towards the east or southeast and linked to the domestic, living world and the rising sun.

also have associations (to a lesser extent) with the rising sun and midsummer. In addition, the surrounding monoliths may have been positioned to align with key points in the calendar year too, acting as seasonal markers. Several of the surrounding monoliths around the cairns at Balnuaran of Clava have an association with other key points in the solar calendar such as equinoxes or quarter days. The very presence of a ring of standing stones, surrounding either a ring cairn or a passage grave – a defining characteristic of Clava-type cairns – strongly suggests this element had an important function in the use of monument, though exactly *what* requires further investigation and consideration.

Further evidence to suggest the significance of these key seasonal events can be seen in the design and planning of Clava-type cairns. Investigations into Balnuaran of Clava have demonstrated the careful and deliberate placement of stones of certain colours and sizes to emphasise the south-west/north-east axis of these monuments, and their alignment on the midwinter setting sun. Red, white and grey coloured stones are deliberately placed for effect, providing a clear contrast between light and dark, midsummer sunrise and midwinter sunset, with stones graded in height towards the south-west and the use of red and pink coloured stones for dramatic effect.⁵⁵ At midwinter, the red and pink stones appear to absorb the sun's rays, glowing red, whereas at midsummer, lighter coloured stones containing mica and quartz, reflect the light and appear to have been designed to 'sparkle' in the rising sun. The association with the rising and setting sun, the cyclical changing of the seasons and the arrangement of light and dark coloured stones may be symbolic of cycles of life and death, and of fertility and regeneration.⁵⁶

The considerable attention to detail suggests that these seasonal events were of great importance to the communities who designed and built these monuments. Their design and form, seemingly intended to create a dramatic visual effect at key points of the year, strongly suggests they were intended to be visited and experienced and that this experience was not solely reserved for occupants of the central chamber. Furthermore, Bradley has suggested that the materials used and the overall design and appearance of the cairn seems to have been more important than the structural quality or longevity of the monument, which adds weight to the argument that this patterning of colour and type of stone had a symbolic meaning or religious significance.⁵⁷ The design of these monuments suggests they were meant to be experienced and viewed from the exterior, and perhaps indicates a shift towards more inclusive and public ceremonies or ritual activities taking place here at key points in the year. It has also

⁵⁵ (Bradley, 2000) (Trevvarthen, 2000)

⁵⁶ See Appendix 2: Additional background information, sections 3 and 4 for further discussion of the symbolic uses of quartz, and colour, and the potential meanings behind this.

⁵⁷ (Bradley, 2000)

been speculated that the platforms may have been used as spaces for ritual; excavations at this site have recovered worked flint, quartz fragments, and seashells in the area of the platforms, which has been interpreted as evidence of continued ritual activity at the site during the Bronze Age.⁵⁸

The monument can provide a valuable insight into the function and use of Clava-type cairns, and clues about the beliefs and practices of those who built and used them. Seasonal cycles and the marking of the passing of time seem to be an important element of the design and construction of Clava-type cairns, as clearly demonstrated here at Balnuaran of Clava. However, we can only speculate as to the symbolism and meaning imbued in these monuments and the ceremonies that may have taken place at fixed points in the year. We must, however, exercise caution in how much we extrapolate or generalise based on interpretation of the cairns here at Balnuaran of Clava, as it is evident that they are exceptional in several ways.

Bronze Age society in general

Clava-type cairns are found in a relatively confined area around the Moray Firth and Inverness. Their distribution complements that of Orkney-Cromarty cairns to the north and recumbent stone circles to the east. The unique geographical distribution and architectural form of these monuments may be illustrative of regional variations in beliefs and ceremonial practices. It may also be illustrative of key routeways and exchange routes (including cultural exchange); the proximity of this monument group's distribution to the Great Glen – a significant routeway connecting northeast Scotland to the southwest, and Ireland, for millennia – is likely to be significant.⁵⁹ Taken further, Clava Cairns may be able to inform our understanding of social organisation and regional differences between communities in the Early Bronze Age.

The survival of these monuments brings us closer to the Bronze Age community that built and used them and tells us something of their social identity. The excellent degree of preservation at Balnuaran of Clava also provides an insight into the technological skill of those who built it.

The apparent use of Clava-type cairns for a single central burial may be indicative of increasing social stratification. Only select individuals were chosen for burial within these monuments; as yet we have very limited evidence to suggest why these individuals were selected or whether they

⁵⁸ (Bradley, 2000)

⁵⁹ One of the few comparable sites is on the west coast at Kintraw close to Kilmartin (Richard Bradley, pers comm.)

had a special status in society, but archaeological evidence certainly supports the impression of increasing social hierarchy and the emergence of elite individuals in the Bronze Age.

Associative

As with many other well-preserved prehistoric monuments, the cairns at Clava have attracted antiquarian interest from an early date (see Bibliography for details). These early accounts form a valuable archive, providing a useful record of the condition of the monument as it has come down to us, and subsequent modern alterations – most notably the works undertaken by the landowner in the 1880s, and clearance and improvement works carried out under Kathleen Kennedy in 1930-31.

Among the many who have sought to investigate these sites are several notable female archaeologists. The interior of the south-west cairn was excavated by Mrs Campbell of Kilravock in 1828/9.⁶⁰ Her excavations uncovered the fragmentary remains of two Late Bronze Age urns and cremated human remains. Later, the site was recorded by Christian Maclagan;⁶¹ often said to be Scotland's first female archaeologist; she was certainly something of a trailblazer, with high standards for excavation and excellent draughtsmanship, though her ideas were not always agreed with and her interpretation of the cairns at Balnuaran are eccentric and unreliable.⁶² Shortly after the site came into State care, minor excavation, clearance and conservation work was undertaken, led by another notable female archaeologist, Kathleen Kennedy. Kennedy led the project in 1930 and 1931, having previously worked alongside other leading professional archaeologists such as Margaret Simpson. At a time when career options were limited for women, Kennedy was one of several well-respected, well-educated and pioneering women working in Scottish Archaeology.⁶³

Professor Stuart Piggott's excavations are significant as they were the first systematic and scientific investigations into Clava-type cairns, though the results of his work specific to this site were limited. As Professor of Prehistory, and successor to Gordon Childe in holding the Abercromby Chair, at the University of Edinburgh, Piggott was an important figure in British archaeology and his publication the *Neolithic Cultures of the British Isles* (1954) was highly influential.

Professor Richard Bradley's comprehensive research project focused upon Balnuaran of Clava and the surrounding landscape and is crucially important for having secured reliable radiocarbon dates for these

⁶⁰ (Lauder, 1830)

⁶¹ Published in *The hill forts, stone circles and other structural remains of ancient Scotland*, 1875, p.74-7 pls xxv, xxvi, xxx.

⁶² (Henshall and Ritchie, 2001, 13-14).

⁶³ (Breeze, Marshall, & Ralston, 2019)

monuments. His project remains the most in-depth study of this monument type to date.

Historical values of Milton Of Clava chapel

The chapel and possible cemetery is of important historical value for its potential to inform our understanding of early Christian and later religious activities. There is potential for the site to enhance our understanding of connections between prehistoric, pre-Christian and later beliefs and practices. If it is indeed an early Christian site then it is of particularly high historical value for its potential to contribute towards our understanding of the establishment, spread and development of Christianity in northern Scotland. Evidence from the site could also shed light on burial practices and traditions and practices associated with saints' cults. Anecdotal evidence suggests that the site was used for the burial of unbaptised children in the post-medieval period, if not before, and could therefore add to our understanding of much more recent burial practices, beliefs and even folk traditions. As the site spans several millennia, it also has the potential to inform our understanding of changing practices over a long period of time, and the reuse and longevity of sacred and ceremonial landscapes.

2.4 Architectural and artistic values

Key aspects of Clava Cairns architectural and artistic values are:

- As well preserved and maintained examples of both ring cairn and passage grave Clava-type cairns with key features intact, this monument is an excellent representative of its class and evidence of a unique building tradition.
- As there are striking similarities in design and construction techniques across all Clava-type cairns they contribute towards an understanding of the site-type as a whole.
- Careful design and deliberate use of different types and colours of stone, shows a sophisticated aesthetic, probably allied to an understanding of the cairn in symbolic terms and indicative of Bronze Age practices and belief systems.
- Cup-and-ring marked stones, that probably pre-date the cairns, are incorporated in an apparently deliberate way.

Architectural

These distinct monuments uniquely combine elements of ring cairn, passage grave and stone circle architecture, yet the combination of these features, certain design elements, and their Early Bronze Age date sets Clava-type cairns apart as a distinct group.⁶⁴ Furthermore, while they incorporate these many different elements similar to other ritual and funerary monuments, they were designed and constructed as single entities, but with construction techniques that are distinctly different to other megalithic cairns. Their overall appearance in general is much rougher and they lack some of the sophisticated architecture and construction techniques of many earlier passage graves. However, the evidence from this site indicates that they were sophisticated designs, far from thrown together. The degree of effort that appears to have gone into the selection of materials and design of these monuments is indicative of important symbolic meaning.

Much of what we currently understand about Clava-type cairns, their architecture and the symbolic meaning of their form, derives from detailed analysis of the cairns here at Balnuaran of Clava. Indeed, many other sites have either not been investigated or are not in a state of preservation as to allow such investigation. The architectural form of Clava Cairns demonstrates a sophisticated use of raw materials for dramatic effect. Great attention was paid to the selection and arrangement of stones by their colour, size and shape to emphasise the light and dark sides of the monument, to enhance the effect of the rising and setting sun, and to enhance the overall appearance of the passage graves when viewed from certain positions.⁶⁵ Both water-worn boulders and quarried local stone were used to construct the cairns, carefully arranged and graded by height, with larger stones used on the south-western arc. The composition and construction of the cairns strongly reflects their orientation on a north-east/south-west axis and their astronomical alignments. There is a deliberate asymmetry in the form of these monuments that appears to have both aesthetic and symbolic functions, rather than purely practical – overall there is a ‘tension between the demands of cosmology and...structural engineering’.⁶⁶ The zoning of certain coloured stones – in particular reds and whites – used in opposition and reflecting the alignment with the midwinter setting sun and the midsummer rising sun, further emphasises the symbolism in the monument’s architecture. The form of Clava Cairns can almost be seen as an embodiment of the seasonal cycles and the movement of the sun – a physical marker of the changing seasons

⁶⁴ Recumbent stone circles are commonly cited as sharing the closest structural affinities with Clava-type cairns, see Appendix 2.4 for further detail.

⁶⁵ (Bradley, 2000) (Trevvarthen, 2000)

⁶⁶ (Bradley, 2000, p. 216)

- and perhaps of life cycles too.⁶⁷ For further information on the use of colour, see Appendix 2.3.

Artistic

The careful patterning of colour and geology in the design of Clava Cairns can be viewed as an artistic element. Though the original meaning, symbolism and belief systems associated with these monuments and their unique architectural form cannot be fully known, the effect of this patterning can still be experienced to some degree by visitors today.

In addition to this, the monument displays evidence for prehistoric rock art, in the form of cup markings. Each of the cairns at the main area of Balnuaran of Clava has evidence for cup-marked stones, with each one seemingly deliberately placed in a meaningful position. Jolly first recorded this rock art and speculated on its meaning in 1882, providing a valuable early record of the decorated stones.⁶⁸ The function or symbolism of these stones and their carvings is still not clear. Cup-marked stones are found widely across Europe, both incorporated into megalithic monuments and on natural rock outcrops. Their meaning has been much debated; one suggestion is that they are associated with route ways, territories or cosmologically significant places in the landscape. They are now widely accepted as Neolithic or Early Bronze Age in date, with later examples generally taking a simpler form. They are often found reused in later monuments, as is likely to be the case here; it is possible that these cup-marked stones were deliberately selected for reuse as physical links to ancestors or the land, or that they were perceived as having special qualities. Whatever the reason for their selection and reuse, it is clear that Early Bronze Age communities valued these earlier carved stones. Interestingly, many of those at Balnuaran were placed in a way that the motifs would have been hidden from visitors to the site.

2.5 Landscape and aesthetic values

The landscape and aesthetic values of the Clava Cairns encompass both the monument's relationship to its setting in prehistory and how the site is perceived or experienced in its modern-day setting. Key aspects include:

- The importance of orientation and siting to the original construction - in a riverine location with a strong emphasis on a south-west alignment; at Balnuaran of Clava the two passage graves are aligned on the setting of the midwinter sun.

⁶⁷ (Bradley, 2000) (Trevvarthen, 2000)

⁶⁸ (Jolly, 1882)

- The topography of the landscape, the quality of the site being somewhat hidden or enclosed rather than prominent within the landscape – a trait common to all Clava-type cairns.
- Possible associations with ancient routeways.
- The modern setting, which determines the atmosphere of the site today, largely as a result of 19th century landscaping and planting designed to ‘recreate’ a druidical grove.
- The contribution the site makes to, and its role within, the Culloden Muir Conservation Area.

Prehistoric landscape setting

Unlike many earlier ritual and funerary monuments, Clava-type cairns were not designed to be visually prominent in the landscape. Typically, they are found in secluded locations, with the monuments themselves being ‘insular and private [in] nature’⁶⁹ and with a relatively limited local prominence. Yet topographic analysis and distribution patterns indicate their placement in the landscape was not without meaning and significance. In general, Clava-type cairns tend to be situated close to rivers or springs, in valleys and natural basins, or river terraces, often with a south-west/north-east alignment, and enclosed by surrounding hills.⁷⁰ Most sites have an emphasis upon views of the southern skies, likely focused upon certain major celestial events such as the midwinter sunset and the major and minor lunar standstills. Though there is on-going debate about astronomical alignments, the accuracy of these and the meanings behind them, observations of the sky and such alignments in the landscape were clearly a factor in the location of these monuments.⁷¹ Their strong association with watercourses is no doubt of significance too, though the meaning is not fully understood.⁷² However, Henshall and Ritchie note that it is difficult to generalise the landscape setting of Clava-type cairns as a group.⁷³

The cemeteries here at Clava are situated on a raised gravel terrace of the River Nairn and aligned roughly north-north-east/south-south-west, with the two passage graves at Balnuaran aligned to the south-west on the

⁶⁹ (Bradley, 2000, p. 182)

⁷⁰ (Henshall, 1963; Bradley, 2000; see Ch8 in particular)

⁷¹ (Bradley, 2000, pp. 181-2; Estaroth, 2018; Burl, 1981)

⁷² Estaroth’s recent paper argues that the rivers were used as routeways, perhaps even processional or pilgrimage routes between the different cairns at different times of year, as some focus upon celestial events around midwinter and others focus upon midsummer events. Communities may have moved between and made use of these sites at different times of year (Estaroth, 2018, pp. 153-4).

⁷³ (Henshall and Ritchie, 2001, 34).

setting of the midwinter sun. This axial alignment is emphasised not only in the architectural design of the cairns, but also in the layout of the cemetery and its placement in the landscape – evidently an important factor in their construction and use. We may never fully understand the meaning attached to this setting and the deliberate placement and alignment in the landscape, yet what we can learn from the site and its positioning, adds to our understanding of the community that built and used it and their cosmology and world beliefs. Interestingly, the later and smaller cairns built around 1000 BC are set on a different axis, perhaps representing different cosmological views and functions, yet they still seek to maintain a link with these earlier cairns. The strong emphasis among all Clava-type cairns upon views of the south-western skies, may have been a key factor not only in their orientation, but also in their siting within certain valleys.⁷⁴ While most Clava-type cairns share this orientation, the passage graves at Balnuaran of Clava are notable for their precise alignment with the midwinter setting sun.

The cairns are set on low-lying land and while they would have been locally prominent, they were not commanding and could not have been seen from a great distance. It is worth noting that the two groups of cairns at Balnuaran and Milton are intervisible with each other. While there are no obvious recorded relationships between natural landscape features and most Clava-type cairns, those within the valley of Strathnairn – and particularly the cemeteries at Balnuaran and Milton – are overlooked by a locally prominent ridge of rounded hills, of which Meall Mor forms a part. Our understanding of the significance of views to Meall Mor and its connection with this landscape, however, remains incomplete.⁷⁵

There is some evidence to suggest that these cemeteries, and the cairns in the wider Strathnairn area, formed part of a sacred or especially significant landscape in the Bronze Age.⁷⁶ There is a particularly dense concentration of monuments in this section of the Nairn valley, and the cairns, such as those that form this PIC, are notably grander in scale. It is also notable that there is a greater number of clusters (probable cemeteries) in this valley as opposed to more isolated Clava-type cairns found elsewhere. The area has been noted as exceptional from an early date, with Jolly's detailed early records of rock art highlighting a particularly rich and dense distribution around Strathnairn.⁷⁷

Clava-type cairns are generally thought to have been situated in landscapes that were suitable for settlement, on good agricultural land and close to sources of water. They were evidently part of the inhabited

⁷⁴ (Bradley R. , 2000, pp. 175-82)

⁷⁵ (Bradley, 2000, pp. 182-3)

⁷⁶ (Bradley, 2000, p. 184)

⁷⁷ (Jolly, 1882)

landscape, which provides us with an insight into Early Bronze Age attitudes towards realms of the living and dead, and the arenas in which ceremonies took place. Archaeological evidence from Balnuaran, Newton of Petty and Raigmore indicate settlement and cultivation activity in the vicinity of the cairns prior to their construction; worked flint recovered from outside the central ring cairn may provide evidence for earlier occupation of the site, and this is further supported by the distribution patterns and density of artefacts found through fieldwalking.⁷⁸ In the wider landscape, along this stretch of valley and the lower slopes either side, there are traces of prehistoric settlement and agricultural activity, though the chronological relationship of these and the cemeteries is uncertain. This not only suggests that such monuments and associated ritual activity were an important part of the domestic sphere and perhaps daily life, but also implies that the area was already significant in some way for the communities that inhabited the landscape. This also supports the argument that, in order to achieve the alignments of the passage graves on key celestial events, the landscape must already have been occupied, and such events observed and recorded by existing communities, prior to planning and constructing these monuments.

The later landscape setting

The original landscape setting of the cairns at Clava has been eroded and obscured to some extent by landscaping and interventions in the 19th century and more recent developments. Clava-type cairns both here and elsewhere were often referred to as stone circles and were believed to have been druidical temples and places of worship, or even administrative gatherings.⁷⁹ Such interpretations of the site influenced tree-planting and landscape designs in the later 19th century in an attempt to recreate the sense of a druidic grove, sheltered and hidden by surrounding trees.

Present day aesthetic

Today, the mature trees certainly contribute towards the atmosphere and secluded aesthetic of the site, though the authenticity of this setting is questionable. The site benefits from roadside access, with an adjacent carpark, though to some degree these developments erode the secluded and quiet nature of the monument and its setting - especially at busy

⁷⁸ The ring cairn at Raigmore may have been built over an earlier timber house. This has been posited at Balnuaran of Clava too, as quarried red sandstone slabs used in the construction of the cairns may have been reused from earlier structures. Palaeoenvironmental evidence from Balnuaran of Clava attests to cereal cultivation in an open environment. (Bradley, 2000, pp. 120-1; 167-170)

⁷⁹ (NSA, 1845; Innes, 1858)

periods. Anecdotal evidence from reviews of the site highlights the calm, peaceful, even other-worldly atmosphere of the site.⁸⁰

The Culloden Muir Conservation Area

This Conservation Area covers an area of some 980 hectares including the historic Culloden Battlefield, which is located on the north bank of the River Nairn, opposite Clava Cairns. The Appraisal recognises as key cultural landscape components the remains of the prehistoric activity in the Nairn valley at Clava, the Battle of Culloden fought on the plateau of the Muir in 1746 and the development of the railways and larger farmsteads of the Victorian period. Clava Cairns, as the best preserved and most accessible elements of the Bronze Age landscape, serve to anchor the wider historic landscape of this area.

The Appraisal also notes the special atmosphere, intangible associations, emotions and legends that accrue to the area. Clava Cairns is a site where many people acknowledge and value these kinds of intangible connections. It may be true to suggest that there are certain linkages between the memorial aspect of the battlefield site and the commemorative and funerary aspects of Clava Cairns.

2.6 Natural heritage values

There are currently (2021) no natural heritage designations associated with the area in Guardianship. The various elements of the site are set among broadleaved deciduous woodland (much of which was planted in the mid-late 19th century) and arable farmland. Compaction due to visitor-footfall erosion may be impacting upon tree roots.

Bats are active in the area, although there is currently no evidence of bats using the site.

Much of the grassland is of limited value to wildlife, however, the perimeter is un-improved grassland and scrub which is a rare habitat of much value. There are some species of local importance (category 3). Plant species of note are the harebell, (*Campanula rotundifolia*) which is on the Scottish biodiversity list, and the bush vetch, (*Vicia sepium*).

⁸⁰ (Clava Cairns Reviews, 2020)

2.7 Contemporary/use values

Visitors and visitor amenities

Clava Cairns is an unstaffed site which is open all year round, and free of charge. There is a visitor carpark adjacent to the main site at Balnuaran of Clava (Group 1), with the remains at Milton of Clava (Groups 2 & 5) signposted from here and situated approximately 500m away. Visitor interpretation is present at both locations. The other areas (groups 3 and 4) are not currently advertised or interpreted to the public because of their poor condition.

A visitor counter was installed at the site in 2019/20; prior to this, visitor numbers were based on estimates only. The estimated numbers have risen significantly in recent years, from 75,802 in 2015-16 to 111,051 in 2019-20.

Much of this is as a result of the success of the Outlander novels, and hit TV series, by Diana Gabaldon. Numerous private tour groups now include Clava Cairns in their itinerary, many specifically because of the connections with Outlander. The site is often said to be the inspiration for the fictitious stone circle of Craigh na Dun where Claire Randall falls through a split stone and travels through time. The presence of a split standing stone at Balnuaran adds to this association and encourages visitors, many of whom touch and take photos of this specific part of the site.

The proximity of the site to other nearby heritage sites such as Culloden Battlefield and Cawdor Castle further strengthen the draw of visitors to this area, and to Clava itself. Furthermore, all three attractions are associated with Outlander-themed itineraries.

Clava Cairns features on several websites and social media pages as a recommended visitor attraction, including Undiscovered Scotland, Visit Scotland and TripAdvisor. There are nearly 700 reviews on TripAdvisor, made by visitors from around the world including across the UK, USA, New Zealand and Australia; the majority of which are positive.⁸¹ Many visitors comment on the quiet, secluded nature of the site, its sacred atmosphere and beautiful landscape setting. The impressive degree of survival, its history, and the authentic feel of the site are also noted in many visitor comments. It provides a rare, tangible and tactile experience of the distant past to visitors.

Astronomical associations

⁸¹ Page accessed 20/01/2020: https://www.tripadvisor.com/Attraction_Review-g186535-d263168-Reviews-Clava_Cairns-Scottish_Highlands_Scotland.html

There is considerable interest in the astronomical alignments of megalithic monuments and the meaning behind this. These seasonal associations are still considered a significant element of the sites, and a draw for visitors and researchers today. Amongst those who have closely studied this important element in the monuments' designs are some of the most influential in the development of the field, including Boyd Somerville, Alexander Thom, Aubrey Burl, Clive Ruggles and Douglas Scott – the last of whom has spent over 30 years investigating orientations and alignments.⁸² Their findings have not only elicited much comment but have also fired the public's imagination.

Spiritual Values

It is evident that people visit the monument at key points in the year, today as in the past. During his investigations at Balnuaran of Clava, Bradley observed several rituals taking place, including two religious celebrations at Easter. He also noted that many visitors leave offerings⁸³ of ashes, coins and gemstones, all deliberately placed at significant parts of the monument.⁸⁴ It is likely that there are modern visitors for whom this site is a place of religious or mystical significance.

The monument seems to be treated with respect and reverence by most visitors, who understand and acknowledge the spiritual significance of the site, though rituals such as the adding or removing stones within the cairns and of touching the stones (often seen as a moving and significant act by visitors) can be damaging and should be discouraged. Several comments from visitors to the site describe their experience as moving, and others express caution over entering or walking on the cairn.

3. MAJOR GAPS IN UNDERSTANDING

- The Scottish Archaeological Research Framework (ScARF) panel report for the Chalcolithic and Bronze Age notes that ritual monuments of this period in general have been given far less attention than earlier monuments. In order to gain a more complete understanding of Early Bronze Age ritual monuments, their

⁸² Details of his investigations can be found online: <https://watchersofthedawn.wordpress.com/>; he has also produced an ebook and DVD 'Watchers of the Dawn' sharing his results of investigations into alignments with the sun and moon and exploring the Celtic and Gaelic folklore and associations with these sites and key points in the year.

⁸³ Such actions can inadvertently harm archaeological sites, and visitors are reminded that the use of candles or naked flames are not permitted at any HES properties.

⁸⁴ (Bradley, 2000, pp. 231-2)

meanings, use and the developments through time, much more research is needed.⁸⁵

- Several researchers have suggested that the cemetery at Balnuaran of Clava is an exception rather than the norm, in terms of alignments and size. The wider region of Strathnairn is notably rich in rock art and funerary sites, but the significance of this region in prehistory – and later – is poorly understood. Was this a sacred landscape? How was it perceived and used – and why?
 - We know very little about funerary practices and burial rites associated with Clava-type Cairns.
 - The inspiration, origins and development of Clava-type cairns and their relationship with earlier chambered cairns is not fully understood. Any further research into the evolution of Neolithic and Early Bronze Age cairns is likely to shed further light on this.
- There is potential for much more to be done in terms of understanding the form, fabric and significance of Clava Cairns. Potential avenues for further research include:
- The form and fabric of the cairns could be better understood through further investigation, such as the potential presence of a ‘porch’ at the entrance of the south-west passage grave, or the nature and significance of the rays between the monoliths and kerbstones of the ring cairn.
 - Building on earlier work, there is potential for greater analysis of the stones themselves, whether they were quarried or re-used, and their provenance.
 - Analysis of the lichens and other microflora on the stones themselves could potentially shed light on episodes of alteration and past interventions.
 - Greater investigation into the cairn and monolith at Milton of Clava, as very little is currently known about this part of the monument.
 - The primary function of the cairns and evidence for burial and funerary rituals.
 - Rock art – how much rock art is there within this site, where is it located and is there any significance in the appearance and nature of these stones within the cairns’ construction. There is potential for much more information to be gleaned about the nature and context of rock art within this site, and other Clava-type monuments.
 - The possible lunar associations remain speculative and much debated. Further investigation into the existence and reliability of lunar, and other solar, alignments and

⁸⁵ (Downes (Ed.), 2012)

consideration of their significance would help us to better understand the meaning and use of these monuments.

- More could be done to understand the long-term use and significance of this landscape. It has been inhabited and shaped since at least the Neolithic and has demonstrable ritual and funerary activity throughout prehistory and into the early medieval period (and potentially later), but the reasons for the selection and reuse of this location is unclear.
 - Linked to this, there is potential for further research into the cultural significance of natural places in the Bronze Age.
- Further survey and analysis of the wider Strathnairn landscape and its archaeology, could enhance our understanding of the full extent of the cemetery and its relationship with the domestic and agricultural sphere in its original Bronze Age context.
 - Such investigations could begin to ask questions about the use of the landscape prior to construction of the Clava cairns, and the nature and extent of any agricultural or occupation activity.
 - It would also be useful to learn more about the contemporary environment of the cairns which could be achieved through palaeoenvironmental investigation.
- Sites such as this often have rich folklore associations, yet little is recorded or published in relation to Balnuaran of Clava. There is potential for research into local traditions and folklore linked to the site. There is also potential to enhance our understanding of local and pre-19th century knowledge and perceptions of the site.
- The possible early chapel site has not been scientifically investigated and very little is known about the site, yet it has potentially high evidential value.
 - It would be useful to be able to confirm the nature and date of the chapel and whether the surrounding enclosure was ever used for burial.

Please note, the research for this document was undertaken during 2020-2021 with limited access to archives and resources, as a result of Covid-19. While every attempt was made for accuracy throughout the statement, errors or omissions may remain. Please direct comments or suggestions to CRTenquiries@hes.scot

4. ASSOCIATED PROPERTIES

Corrimony Chambered Cairn. Monuments of similar date are to be found at **Kilmartin**. Stone circles with some related features can be visited at **Tomnaverie, East Aquhorthies, and Loanhead of Daviot**. The nearest Historic Scotland property is **Urquhart Castle**.

5. KEYWORDS

Clava; Cairn; Clava-type cairn; ring cairn; Chambered cairn; Cup marks; Ritual; Burial; Passage grave; Tomb; Archaeoastronomy; Stone circle; Standing stone; Prehistoric rock art; Bronze Age; Highland; Outlander.

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APPENDICES

APPENDIX I: TIMELINE

- c. 2000 BC Passage graves and ring cairns first constructed at Balnuaran of Clava.
- c. 1500-1000 BC Cemetery is extended with the addition of new, smaller cairns on a different axis probably including the kerb cairn within Group 1 and the ring cairn at Mains of Clava South-East (Group 3). Alterations to the south-west cairn possibly including deposition of the two vessels and cremation deposits excavated in 1828. Scattered cremation deposits and flakes of worked stone are also thought to be associated with this phase of Late Bronze Age activity.
- 500-1000 AD Cremation burial placed within the central ring cairn.
- 1824 George Anderson calls attention to the cairns and stone circles on the Plain of Clava
- 1828 Mrs Campbell of Kilravock supervises excavations in the south-west passage grave; fragments of two urns and cremated remains are discovered.
- c. 1858 Early sketch drawings and description of the main cairns published by Cosmo Innes.
- 1870-1 The owner diverted a road which ran between the cairns at Balnuaran of Clava in order to offer them protection, Part of the new road clipped the edge of the south-west passage grave and two monoliths were relocated. In addition, fallen standing stones were re-erected, vegetation was cleared, and some of the cairn material was robbed to construct enclosing walls. Many of the mature trees that cover the site were planted around the same time.
- 1875 Site is recorded by Christian MacLagan.
- 1881 The three main cairns at Balnuaran of Clava were 'restored' by the owner, but the details of what was carried out are unclear.⁸⁶

⁸⁶ (Henshall, 1963, p. 361)

- 1882 The site is one of the first in Britain to be scheduled under the Ancient Monuments Protection Act 1882 on 18 August 1882.
- 1882 Jolly records some of the cup-marked stones at Clava, as part of a comprehensive survey of cup-and-ring marked stones around Inverness.
- 1884 Pitt Rivers, the first Inspector of Ancient Monuments, attempts to place the monument under Guardianship but fails.
- 1884 James Fraser, civil engineer, surveys the site as part of an extensive project across the Highlands.
- 1897 The National Trust writes to HM Commissioner of Works to bring attention to two large stones which have been recently dug out and removed.
- 1910 Admiral Boyd Somerville surveyed the site.
- 1923 The site is rescheduled on 31 December 1923.
- 1925 Site taken into Guardianship on 1st June.
- 1927 Fencing and relocation of the road may have taken place around this time, AM Advisory Board minutes are unclear. Evident that the site was overgrown and requiring clearance and improvement works.
- 1930 Clearance, removal of vegetation and minor repair works undertaken by Kathleen Kennedy in 1930 and 1931.⁸⁷
- 1953 Excavations carried out by Piggott.
- 1980 Archaeological assessment of the proposed carpark; Plans considered (and avoided) a low rubble bank and earthfast orthostat.
- 1990 Archaeological excavation and assessment of ring cairn at Milton of Clava by Niall Sharples.⁸⁸
- 1994-7 Archaeological excavation, field survey and recording by Professor Richard Bradley.
- 2020 CFA Archaeology undertook an erosion survey of the site, due to on-going concerns around the impact of visitor erosion.

⁸⁷ (Barclay G. , 1990)

⁸⁸ (Sharples, 1993)

APPENDIX 2: ADDITIONAL BACKGROUND INFORMATION

1. Chronology and sequence of construction

The dating of Clava-type cairns had long been a subject of debate. Their architecture combines features of both Neolithic and Bronze Age ritual and funerary monuments, though their passage grave architecture had led scholars to believe they were most likely Neolithic in date. Bradley's work in the 1990's transformed this view, clearly indicating that these monuments are Early Bronze Age in date.⁸⁹ Joseph Anderson was the first to tentatively suggest a date somewhere between the Late Neolithic and Early Bronze Age as early as the 1880s,⁹⁰ but it was not until Bradley's extensive investigations in the 1990's that the widely accepted Neolithic date was overturned. Scientific dates from Balnuaran of Clava clearly indicated that these monuments are Early Bronze Age in date.⁹¹

The only radiocarbon dates for Clava Cairn passage graves come from the north-east cairn at Balnuaran of Clava; all these dates fall between 2150 and 1700 BC, with the date most likely being between 1850-1770 BC.⁹² There are dates from a wider range of ring cairn sites, though these are less consistent and tend to be a few centuries earlier. Bradley has cautioned that the dating evidence in general for Clava-type cairns is very limited and that those dates from Balnuaran of Clava may not be representative of other Clava cairn passage graves. Nevertheless, the results of Bradley's investigations represent a significant development in our understanding of these Early Bronze Age monuments.

Investigations at Balnuaran of Clava also provided new evidence for the sequence of construction of Clava Cairn passage graves, suggesting for the first time that these structures seem to have been devised and constructed as a whole. It had previously been suggested that the stone circle and cairn elements of Clava-type cairns belonged to two different phases of construction. In addition, the distinctive external platforms that surround Clava-type cairns had been interpreted by some as a form of blocking, formally closing the monument at the end of their use.⁹³ However, the evidence from Balnuaran of Clava demonstrates that the external platform was integral to the structural stability of the cairn, acting as a buttress to prevent the kerb stones being pushed over by the weight of the cairn material. This idea can be supported by evidence from **Corrimony** where

⁸⁹ (Bradley, 2000)

⁹⁰ Henshall and Ritchie, 2001, 17; Anderson 1886, 300).

⁹¹ (Bradley, 2000)

⁹² (Bradley, 2000, pp. 160-161)

⁹³ (Barclay, 1992)

the surrounding platform is much narrower and, as Piggott has noted, almost all the kerb stones had been forced outwards by the pressure of the cairn.⁹⁴ The platforms do seem to have been constructed a short time after the central cairn was completed, but prior to the monument being ‘closed’. This development sequence is supported by the evidence from Corrimony, where the external platform is interrupted by a ‘porch’ like feature at the entrance, indicating that the platform did not block off or close the monument.

2. The use of quartz

Quartz has been found in large quantities at many ritual and funerary sites – at recumbent stone circles, burial cairns, and rock art sites. For Clava-type cairns it seems to have been an important raw material used in the construction of the monument and potentially used in ritual activities. Bradley and Trevarthen have noted the deliberate use of stone containing quartz to emphasise light and dark sides of the cairns at Balnuaran,⁹⁵ and significant amounts of quartz are found within the body of the cairn material at **Corrimony** too. It has been suggested that lighter coloured stones with high quartz content were deliberately positioned for visual effect, to reflect the rising midsummer sun on the north-east side of the cairn.⁹⁶ Furthermore, Piggott’s excavations revealed a dense concentration of quartz fragments on the platform at Corrimony, particularly in association with the kerb stones. The surface of the cairn may have been covered with quartz at the time it was in use, which would undoubtedly have been an impressive sight.⁹⁷

The prevalence of quartz fragments at such monuments strongly suggests that it had a symbolic meaning and was perhaps used in rituals. Bradley has suggested that the white, reflective material, may have had a symbolic association with the moon. He also notes that when struck, quartz emits a green spark and that the act of creating the fragments may have been an element of ritual activity; quartz may also have been perceived as having magical qualities.⁹⁸

3. The Archaeology of Colour

The archaeological study of colour and its potential for enhancing our understanding of past cultures and belief systems, is very much in its infancy, yet there is plentiful evidence to demonstrate that colour was used

⁹⁴ (Piggott, 1956, p. 175)

⁹⁵ (Bradley, 2000) (Trevarthen, 2000)

⁹⁶ (Bradley R. , 2016, p. 55)

⁹⁷ (Piggott, 1956)

⁹⁸ (Bradley 2000. 126-8)

to define and reinforce meaning in prehistoric architecture. Patterning and the use of colour such as that found in the Clava-type cairns can be seen in megalithic monuments across Europe.⁹⁹ Indeed, the use of red, black/grey and white has been found to be used symbolically across many different periods and cultures around the world. Some have suggested these colours have a universal, primeval significance and are representative of life cycles and forces. Generally white is perceived as symbolic of light, purity and life, red is seen as representative of blood, life, warmth, and black or grey is associated with darkness and death. While attempts to decode the symbolic meaning of these colours is largely based on speculation, their ubiquity and repeated occurrence in ritual or ceremonial contexts nevertheless implies symbolic importance, the exact meaning of which is likely to be culturally specific. Colour – in particular the use of red, white and black – is evidently closely intertwined with cultural world views, beliefs and practices.

There is no doubt that colour was used to dramatic effect in the construction of the cairns at Balnuaran of Clava. Here the careful selection and placement of specific coloured stones has been employed to modify and enhance the experience of those who visited or used the monuments. The use of red sandstones and white/lighter stone with quartz inclusions is striking and reinforces the celestial alignments of the cairns and their orientation in the landscape. The south-west quadrant of the cairns – in particular the south-west passage grave – uses more red and pink stones that would absorb the rays of the midwinter setting sun and appear to glow, whereas the north-east sides of the cairns – in particular the north-east passage grave – use lighter stone with a preference for those with quartz inclusions that would sparkle and reflect the light of the rising sun at midsummer.¹⁰⁰ ¹⁰¹ The patterning evident here, and similar examples at other megalithic sites, has led researchers to suggest these colours represent oppositions between light/dark, sun/moon, life/death, winter/summer.¹⁰² It is notable that Bradley's work at Balnuaran of Clava was one of the first in-depth archaeological studies of the use of colour in megalithic architecture, and the site is of great value in contributing towards debates around the meaning and use of colour in prehistory. It also reinforces the significance of Clava Cairns within the wider pan-European tradition of megalithic architecture, if not beyond.

4. Recumbent stone circles

⁹⁹ (Lynch, 1998; Scarre, 2002; Darvill, 2002)

¹⁰⁰ See Trevarthen (2000) and Section 5 'Identity, Society, Belief Systems' in the ScARF Chalcolithic and Bronze Age panel report (Downes (Ed.), 2012) for further discussion on the significance of quartz and use of colour.

¹⁰¹ (Bradley, 2000, pp. 20-3; 126-8; Trevarthen D. , 2000; Trevarthen & Jackson, 1997)

¹⁰² (Darvill, 2002; Trevarthen D. , 2000; Trevarthen & Jackson, 1997)

Clava-type cairns share several affinities with recumbent stone circles (RSCs) and the distribution of the two monument types complements each other, with RSCs being distinct to the north-east of Scotland, found largely in Aberdeenshire. Both monument types feature monoliths graded in height with an emphasis on the south-west quadrant. Where the Clava Cairns have larger upright stones or passages aligned towards the south-west, RSCs are defined by the large recumbent stones in the southern quadrant. Both monuments have clear associations with celestial phenomena – the midwinter sun being the dominant focus – and both are associated with funerary practices in addition to other apparent ceremonial functions.¹⁰³

5. Lunar alignments

Clava-type cairns, like RSCs, also appear to have links to the lunar calendar, particularly with the major and minor lunar standstills that occur approximately every 19 years.¹⁰⁴ Although Burl argued that the Clava Cairns were aligned on various positions of the moon, Bradley has since demonstrated the architectural emphasis of the alignments at Balnuaran of Clava was focused on solar alignments.¹⁰⁵ However, there remains a possibility that lunar alignments were also a consideration. Recent research has investigated Clava-type cairn associations with the midsummer full moon at the major lunar limit and has shown clear links between ‘dramatic’ views of the moon emerging above or skimming the horizon at many Clava cairn sites, though not at Balnuaran of Clava.¹⁰⁶ Associations with the minor and major lunar standstills suggests prior knowledge of these views and their observation over several generations, emphasising both the importance of a lunar connection and the assumption that these monuments were built in lived-in landscapes. Lunar and other possible alignments remain poorly understood and would benefit from further research.

For further discussion of the lunar alignment of Clava Cairns see Bradley (2000), Burl (1981), Estaroth (2018), Ruggles (1999) and Scott (2016).

¹⁰³ For further discussion of these parallels see (Bradley 2000; Bradley 2005; Welfare 2011).

¹⁰⁴ (Bradley, 2000; Estaroth, 2018; Ruggles, 1999)

¹⁰⁵ (Burl 1981, 257-65; Bradley 2000, 126; Bradley 2016)

¹⁰⁶ (Estaroth, 2018)