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The Moon and the Bonfire.

An Investigation of Three Stone Circles in North-East Scotland

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Chapter 4

THE RESULTS OF FIELDWALKING AT TARLAND AND CASTLE FORBES

Tim Phillips

It remained to establish the place of these monuments in the prehistoric pattern of settlement. This question was investigated by two fieldwalking surveys, each of which focused on the area surrounding one of the excavated monuments. For logistic reasons it seemed most efficient to confine each project to a single large estate in order that problems of arranging access could be minimised and the maximum available time could be devoted to fieldwork. This was feasible as two of the sites, Tomnaverie and Cothiemuir Wood, were in rather different natural settings, although both were close to large tracts of arable land.

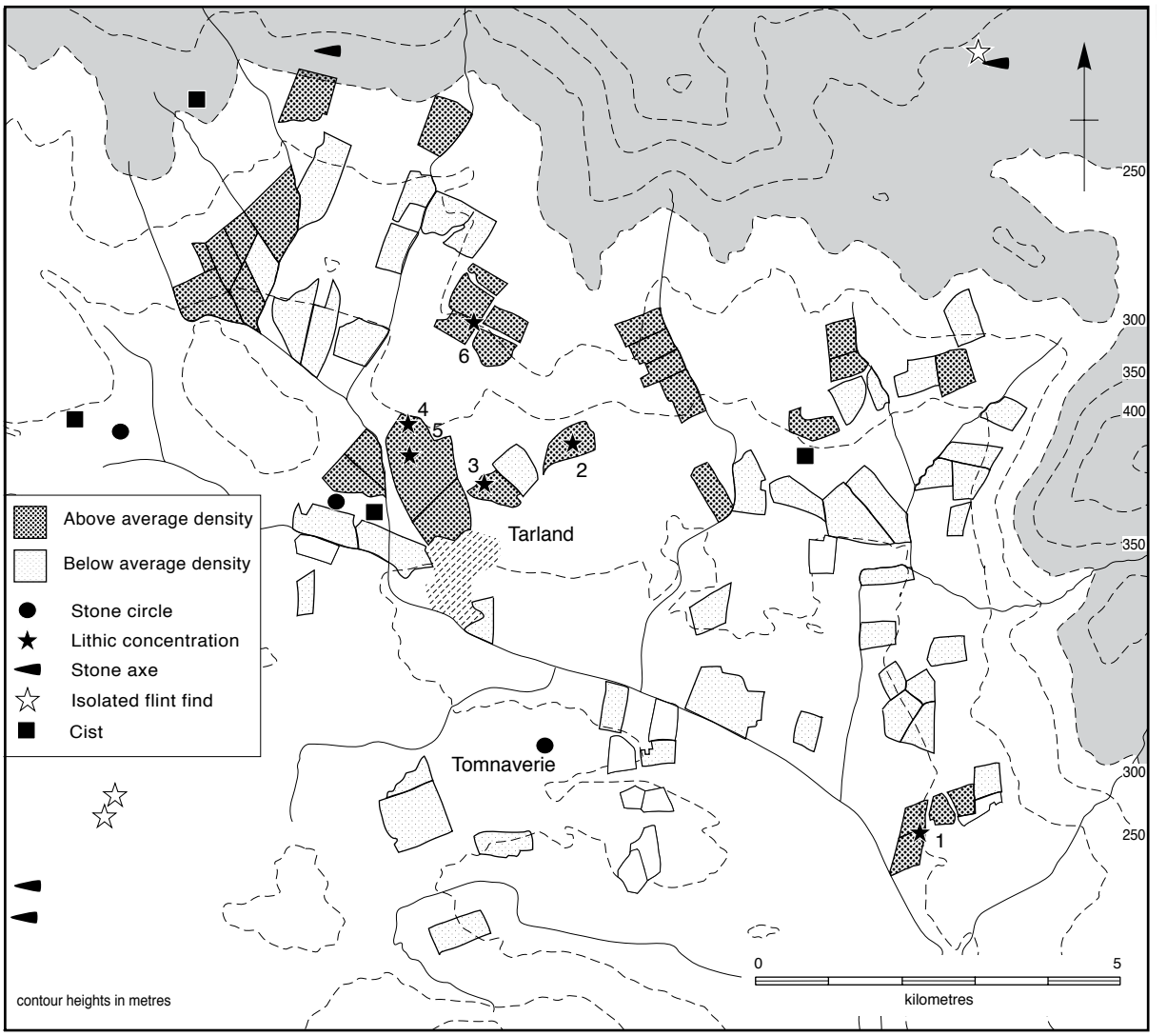
FIELD WALKING SURVEY IN THE HOWE OF CROMAR

4.1 BACKGROUND

Many flints, some carved stone balls, stone axes, 'cinerary urns' and bronze axes have been found in the Howe of Cromar over the last 200 years. Most of these finds are listed as coming from the parish of Tarland, but the exact findspots for most of this material are uncertain. Where the grid references for stone and flint axe finds are known, they tend to be around the edges of the Howe. A few other finds are quite well provenanced. Three cists have been found in the same area. A further example was discovered above the 300m contour to the north-west of Tomnaverie. This contained ashes and charcoal (NJ40NE3; this and subsequent references are to the National Monuments Record of Scotland). To the north-east of the site, on the 200m contour, there was a simple cist (NJ40NW6). The site of another stone circle of uncertain type, Waulkmill (NJ40SE4, Coles 1905), was located on the valley floor. All that remains of this site is a single standing stone. On the ridge on the eastern side of the Howe is the site of a supposed stone circle, Brankholme Cottage (NJ40NE4), which was destroyed around 1847. In the centre of the Howe, not far from the shore of the drained loch, what may be part of a ring ditch is known from an aerial photograph taken in 1998 (NJ50SW32), but this may be the site of a souterrain. The evidence indicated a substantial prehistoric presence in the Howe of Cromar, but the exact nature and location of this activity was uncertain (illus 91).

4.2 THE SCOPE OF THE SURVEY

The intention was to sample as much as possible of the local topography around the Tomnaverie stone circle, apart from the position of a loch on the floor of the basin which was not drained until the 19th century. The area to the south of the stone circle was also under-represented, but this reflects the unproductive nature of the land, little of which was ploughed. Line walking at 20m intervals was the chosen method. This had already been successful in locating areas of prehistoric domestic activity in Strath Tay and around the shores of the Moray Firth (Bradley 2000, chapter 9; Phillips 2002, 272–94, 346–51). At this scale the presence or absence of prehistoric activity can be identified across a large area of land. Moreover, it has been shown that artefact types are recovered in the same proportions by walking at 20m intervals as in 5m line walking (Bradley 2000, 192). This method has the advantage that large areas can be covered quickly and efficiently by a small team. The material was bagged by field, and the location of individual finds was marked on sketch plans of the areas walked. By this means any discrete clusters of material were recognised at once and the locations of diagnostic artefacts were recorded. This level of detail could be achieved without any significant loss of time.

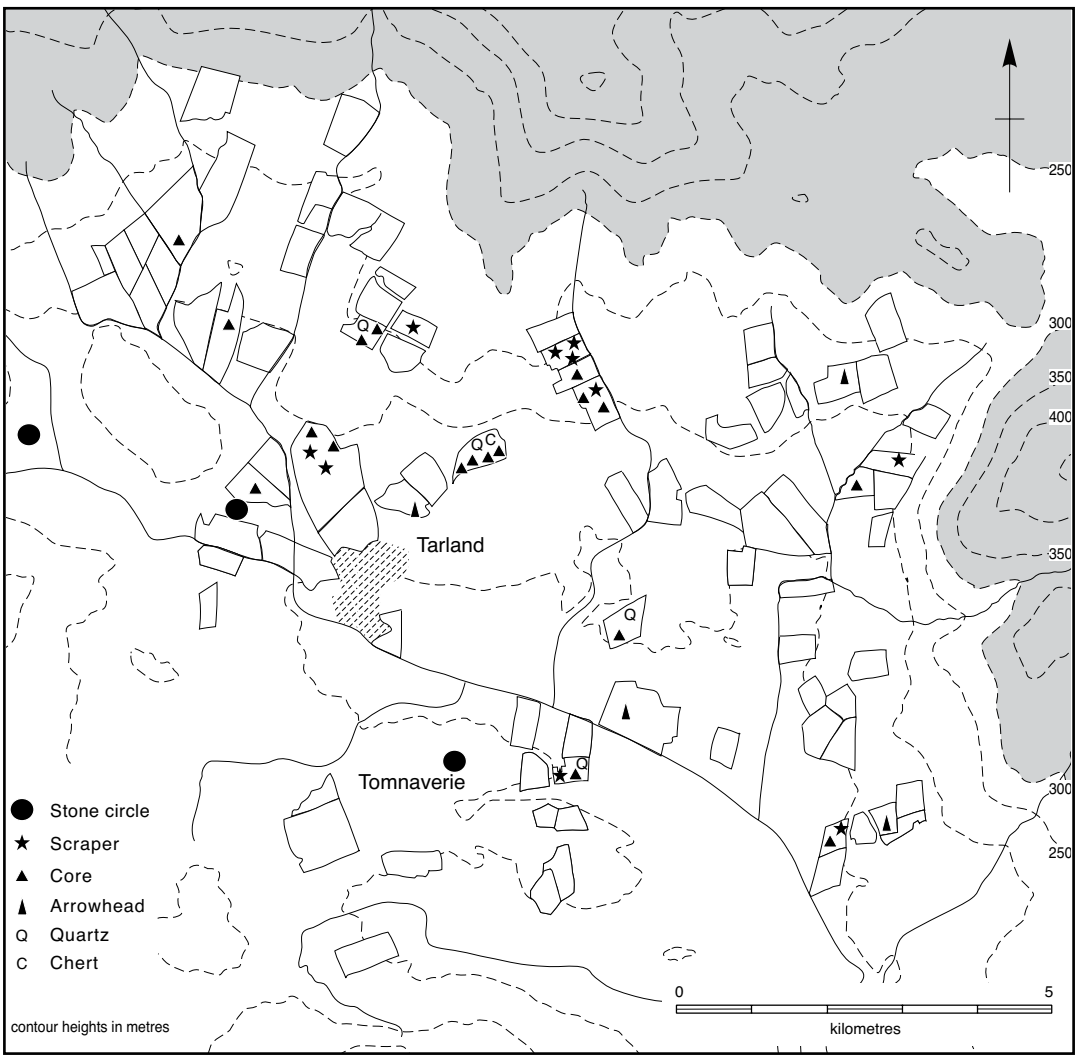


91 The extent of the Howe of Cromar fieldwalking survey in relation to the distribution of artefacts and monuments previously recorded and showing the concentrations of lithic material identified in the survey. 1: Titaboutie; 2: Tarland Lodge; 3: Knappieround; 4: Rowan Bank North; 5: Rowan Bank South; 6: Ranna.

4.3 THE ARTEFACT ASSEMBLAGE

Across an area which extended from the highest cultivated land in the Howe of Cromar at 350m OD down to the shoreline of the former loch 86 fields, comprising 516.5 hectares, were sampled. The work was undertaken in ploughed or seeded fields and on land under winter crop that had recently germinated. All these fields were well weathered, providing the best possible conditions of surface visibility. 492 lithic artefacts were recovered. They are listed in Tables 17–20.

The vast majority of the artefacts were flint. Where the cortex could be identified it was overwhelmingly from beach pebbles. This would indicate that the material was being brought in from outside, probably from sources on the east coast. The next largest component of the assemblage was struck quartz. Where the cortex could be identified this came mainly from pebble sources, but outcrops of this material were also being exploited. Natural pebble and outcrop quartz were found throughout the study area, indicating that local sources could



92 The distribution of diagnostic artefacts in the Howe of Cromar fieldwalking survey.

have been used. A few pieces of worked chert, quartzite and rock crystal were also found.

The flint assemblage comprised mainly secondary and inner worked pieces, and there was very little primary material. This is the expected pattern for a material being used at a distance from its source. Interestingly, none of the quartz showed signs of primary working. This may suggest the intensive use of quartz, or may simply be a reflection of the problems of distinguishing worked quartz from plough-struck pieces in cultivated fields (Saville and Ballin 2000).

Most of the artefacts showed the same flaking techniques as the material recovered from the excavation of the stone circle. They included a partially made transverse arrowhead and four barbed and tanged arrowheads (illus 93, nos 5–8 and 13). These should be of approximately the same age as the stone circle. A small proportion of the artefacts may date from the Mesolithic or Earlier Neolithic periods. These included a few flint blades, blade cores (illus 93, nos 1, 2 and 4) and a core rejuvenation flake, but the quantity of this material was low, making up only 5% of the assemblage. The results of the survey suggest that in only one area was there a concentration of this type of material, and it appears to be mixed with later artefacts.

Table 17 The raw materials used in the lithic assemblage from the Howe of Cromar field survey.

Flint	384
Quartz	94
Chert	4
Quartzite	2
Rock Crystal	2
Total	486

Table 18 The composition of the lithic assemblage from the Howe of Cromar field survey.

Flakes	267
Blades & PBT*	23
Chunks	85
Chips	87
Rolled Flint Pebbles	5
Cores/Core Pieces	18
Gun Flint	1
Total	492

* Pieces possibly worked by blade technology

Table 19 The artefact assemblage from the Howe of Cromar field survey.

Retouched	19
Utilised	20
Scrapers	10
Blade Cores	3
Arrowheads	5

Table 20 The representation of worked flint and quartz from the Howe of Cromar field survey.

	Flint	**Quartz**
Primary	13	–
Secondary	134	38
Inner	237	56

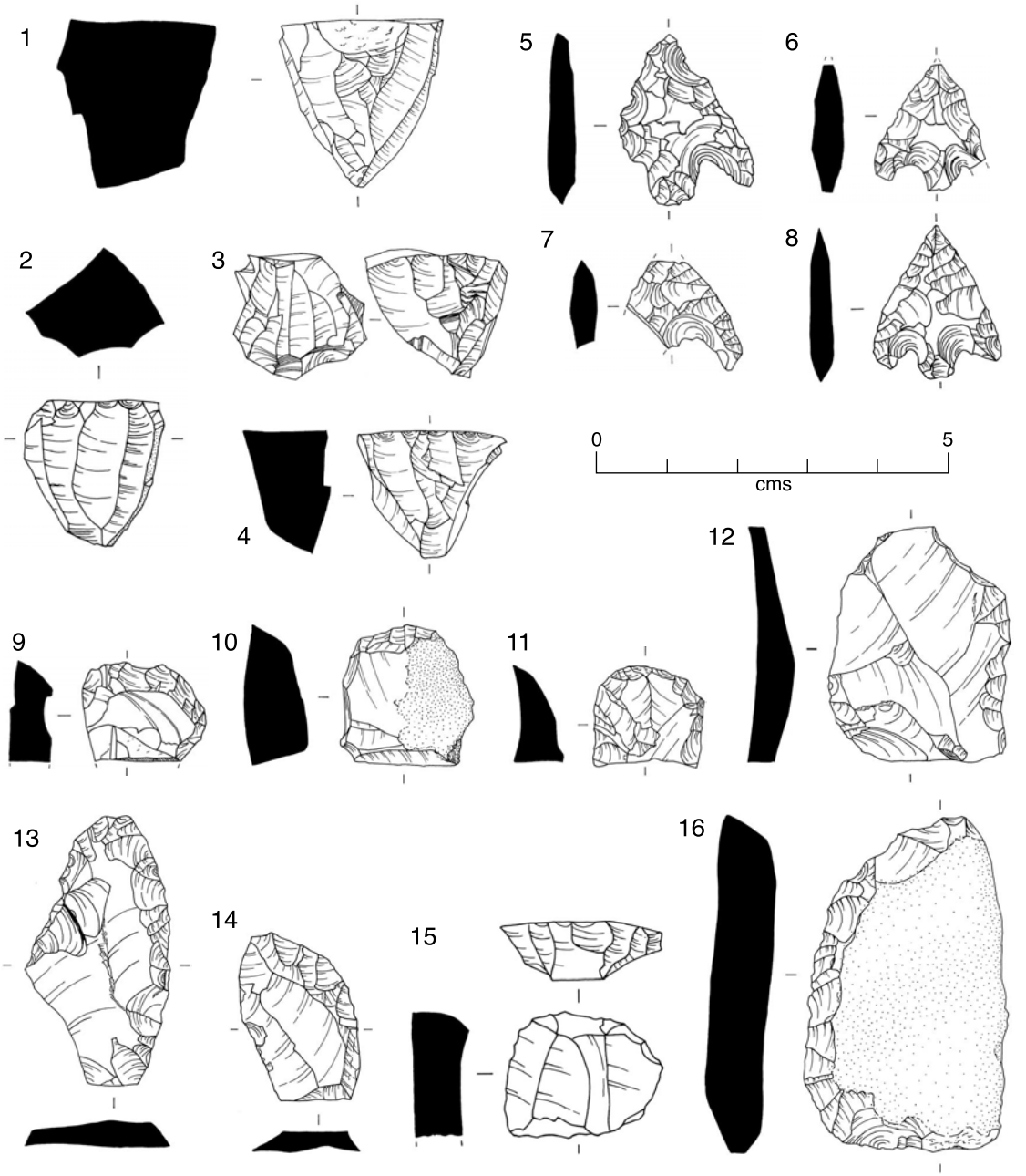
4.4 THE DISTRIBUTION OF SURFACE FINDS (ILLUS 92)

The higher densities of material extended across the fields north of the Tomnaverie stone circle, where they were found between the 150m and 300m contours. There was a smaller area with a similar density of artefacts close to the shoreline of the former loch. With that exception, the lower densities of finds came from the fields on or below the 150m contour, that is, the area around the loch and close to the Tomnaverie stone circle. The distributions of worked flint and quartz were similar to one another, although there was a higher proportion of flint in some of the fields on the higher ground. The fields beside the Waukmill stone circle produced few finds, but there was a higher density of lithic material in the fields rising up to the north of this site. However, it is uncertain whether this monument was a stone circle of the recumbent type. The area around the Brankholme Cottage site was not sampled.

The relative densities of flint and quartz are reflected by the distribution of retouched and utilised artefacts. The great majority of these were scattered on south-facing slopes between the 150m and 300m contours, to the north of the Tomnaverie stone circle and beyond the head of the loch. There was a single cluster of material by the eastern shore of the loch. These parts of the landscape included finds of cores and scrapers (illus 93, nos 9–12 and 14–16). Although most of the arrowheads were found in these areas, they tended to be isolated finds away from the main concentrations of material.

4.5 DETAILS OF THE MAIN CONCENTRATIONS

In six places distinct concentrations of artefacts were recognised (illus 91). One of these was close to the eastern shore of the loch, whilst the other five 'sites' were in a limited area north of the modern village of Tarland. This is the part of the landscape with the highest overall density of lithic material. These clusters were well defined and their extent was easy to map in the field. All were in sheltered locations and faced into the sun. Apart from one concentration, which may result from a knapping event, they could mark the positions of settlements. The Tomnaverie stone circle is visible from all but one of these places.



93 The lithic artefacts from the Howe of Cromar fieldwalking survey. 1: burnt flint core; 2: flint core; 3: burnt flint core; 4: flint core; 5: barbed and tanged arrowhead; 6: barbed and tanged arrowhead; 7: barbed and tanged arrowhead; 8: barbed and tanged arrowhead; 9: flint scraper; 10: flint scraper; 11: flint scraper; 12: flint scraper; 13: unfinished flint arrowhead or knife; 14: flint scraper; 15: flint scraper; 16: knife/side scraper.

1. Titaboutie (NJ 5033 0373)

This site is on the eastern side of the Howe of Cromar just above the old shoreline of the loch. The surface finds were concentrated on a spur of land split between two fields on the 150m contour. The scatter included a scraper, a utilised flake with silicia gloss, as well as a core rejuvenation flake which may date from the Mesolithic or Earlier Neolithic period. No material was found in the lower areas of the fields or on each side of the scatter.

2. Tarland Lodge (NJ 4880 0543)
This field lies back from the north side of the loch just below the 200m contour. The lithic material was concentrated on the break of slope in the centre of the field. This included one quartz, one chert and two flint cores. Only occasional finds were recovered from the area below.

3. Knappieround (NJ 4822 0525)
This site is located on a level spur about 1.5km south-west of the previous site. Field conditions allowed all the surface finds to be collected. The material consisted of 205 very small flint flakes (plus 16 similar pieces from 20m line walking). This was probably the site of a knapping floor where one or more events had taken place. The material was spread over an area measuring 13m by 30m.

4. Rowan Bank North (NJ 4773 0565)
A large concentration of material was found towards the top corner of this field, on the 200m contour. This included two flint cores and a scraper. The field is about 1km north of the drained loch, and the site was just below a spur to the north, which is covered by trees. It is probable that the concentration spreads into this area.

5. Rowan Bank South (NJ 4790 0535)
This site was lower down the same field as the previous concentration. It consisted of a small but discrete collection of artefacts including a scraper. It was located on a level area in the centre of an undulating slope.

6. Ranna (NJ 4823 0644)
This is the only site from which Tomnaverie cannot be seen. It is located in a sheltered valley on the 250m contour, about 2km north of the drained loch. The artefacts were concentrated at the lower end of two fields on each side of a stream. Among the lithic artefacts were a high proportion of blades and a blade core, suggesting that there may be a Mesolithic or Earlier Neolithic component to this site, although these finds were probably mixed with later material.

4.6 DISCUSSION

Allowing for the limitations imposed by the availability of cultivated land in the area around the stone circle, the concentrations of lithic material lie between 1.8km and 2.9km away. Although Tomnaverie is highly visible from most of the scatters, topographically they would have been separated from the monument by the loch or by areas of low marshy land. The stone circle's apparent isolation may be misleading as some parts of the study area have more cultivated fields than others, but this is unlikely because the stone circle is located in the zone with the lowest density of artefacts. Of the 86 fields sampled in the survey, only eight were completely devoid of lithic material. Five of these are within a short distance of Tomnaverie. The same would not apply to the other stone settings in the study area. They were destroyed many years ago and nothing is known of their forms or date.

Tomnaverie overlooks large parts of the Howe of Cromar and commands a view in all directions. However, it is also located towards the limits of the fertile soil on the northern side of the basin. The land to the south is much poorer. In this sense the stone circle is not located in the centre but on a natural boundary. The results of field survey strongly suggest that it was also at the edge of the earlier prehistoric landscape. It could be seen from a number of settlement sites, and yet it was also detached.

FIELD WALKING SURVEY ON THE CASTLE FORBES ESTATE

4.7 BACKGROUND

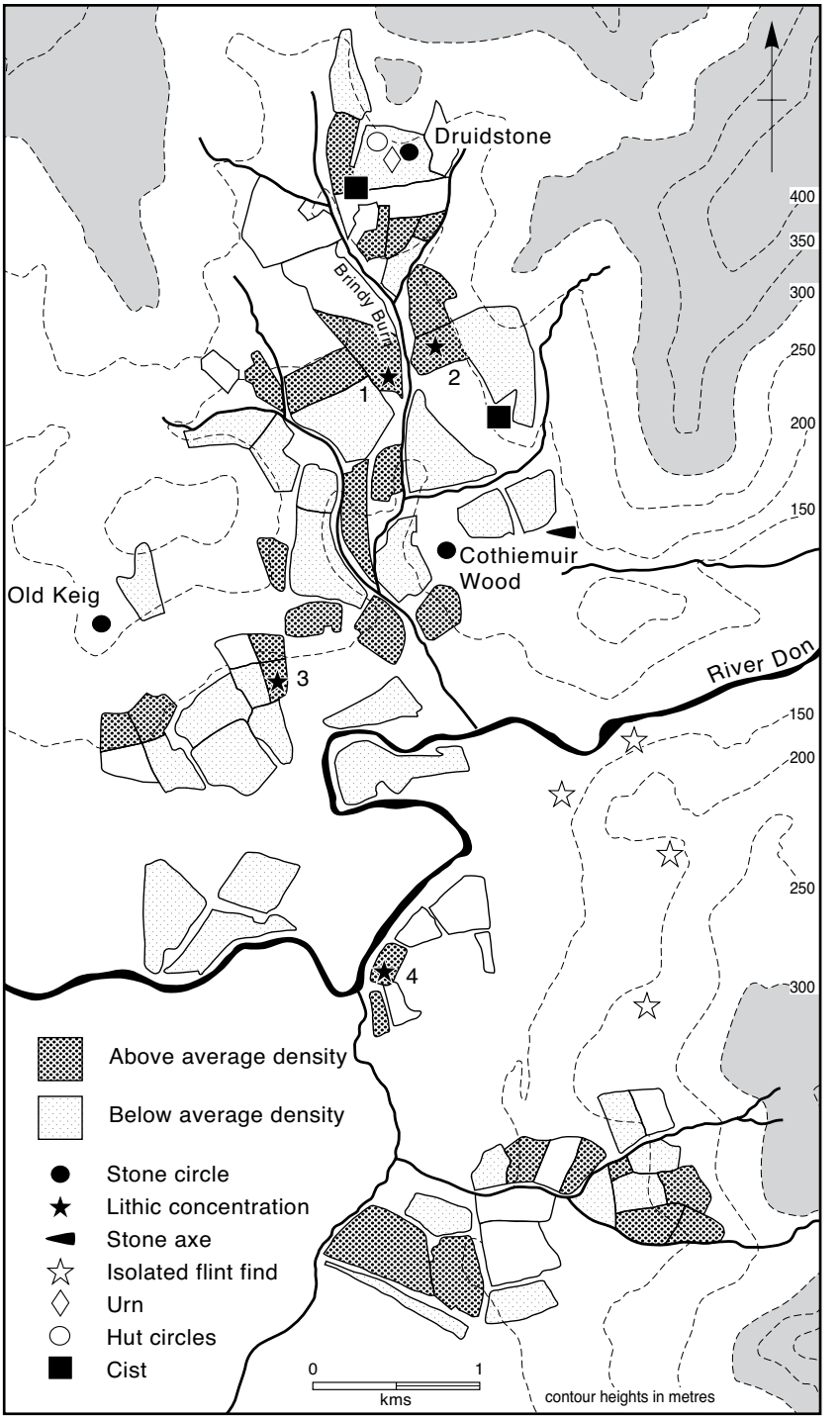
Again it seemed important to relate the Cothiemuir Wood stone circle to the wider pattern of settlement. The same applies to its neighbour at Druidstone. Too few cultivated fields were available to extend the analysis to Old Keig. Apart from the stone circles, no other prehistoric monuments survive within the immediate vicinity. Two cists (NJ62SW16 and NJ62SW142) were found during land improvement to the north of Cothiemuir Wood. They were located on the top of the ridge on the eastern side of a stream. Urns containing charred bones (NJ62SW14 and NJ62SW15) were discovered in the immediate vicinity of the Druidstone recumbent stone circle. Flint arrowheads of unknown type (NJ61NW5) were found on the west-facing valley side to the south of Cothiemuir Wood, and a stone axe

(NJ61NW3) has been recorded on the rising ground to the east. A stone ball and a carved stone ball (NJ51NW19) reportedly come from Keig parish, but their exact find spots are unknown. All these artefacts were found in the 19th century. The exact nature of prehistoric activity in this area was uncertain. The stone circles, cists and chance finds indicated some form of occupation, but no systematic study had taken place (illus 94).

4.8 THE SCOPE OF THE SURVEY

The project used the same method as the Tomnaverie field survey, but with one important difference. Some of the winter crop around Cothiemuir Wood had grown higher than was desirable, but the tractor tracks that allowed access for spraying and feeding the crop were spaced at 20m intervals. Individual tracks allowed about 0.5m width of visibility. Where the winter crop was judged to be too high, both the tractor tracks were walked, allowing a corridor one metre wide to be sampled. Eight fields were walked by this method. The results were similar to those from the areas investigated by more conventional methods.

74 fields, comprising 619.9 hectares, were sampled. They included the available land immediately around the Cothiemuir Wood stone circle and the valley of the Brindy Burn draining down from the north. The study area extended up to the 275m contour and included the area around the Druidstone recumbent stone circle. To the west, a series of fields on the slope below the Old Keig stone circle were walked. The sample reached from the banks of the Don at 125m up to the 250m contour, but the area immediately around this monument could not be sampled because the land was under pasture. To the south, a block of fields were also walked as far as the 225m contour.

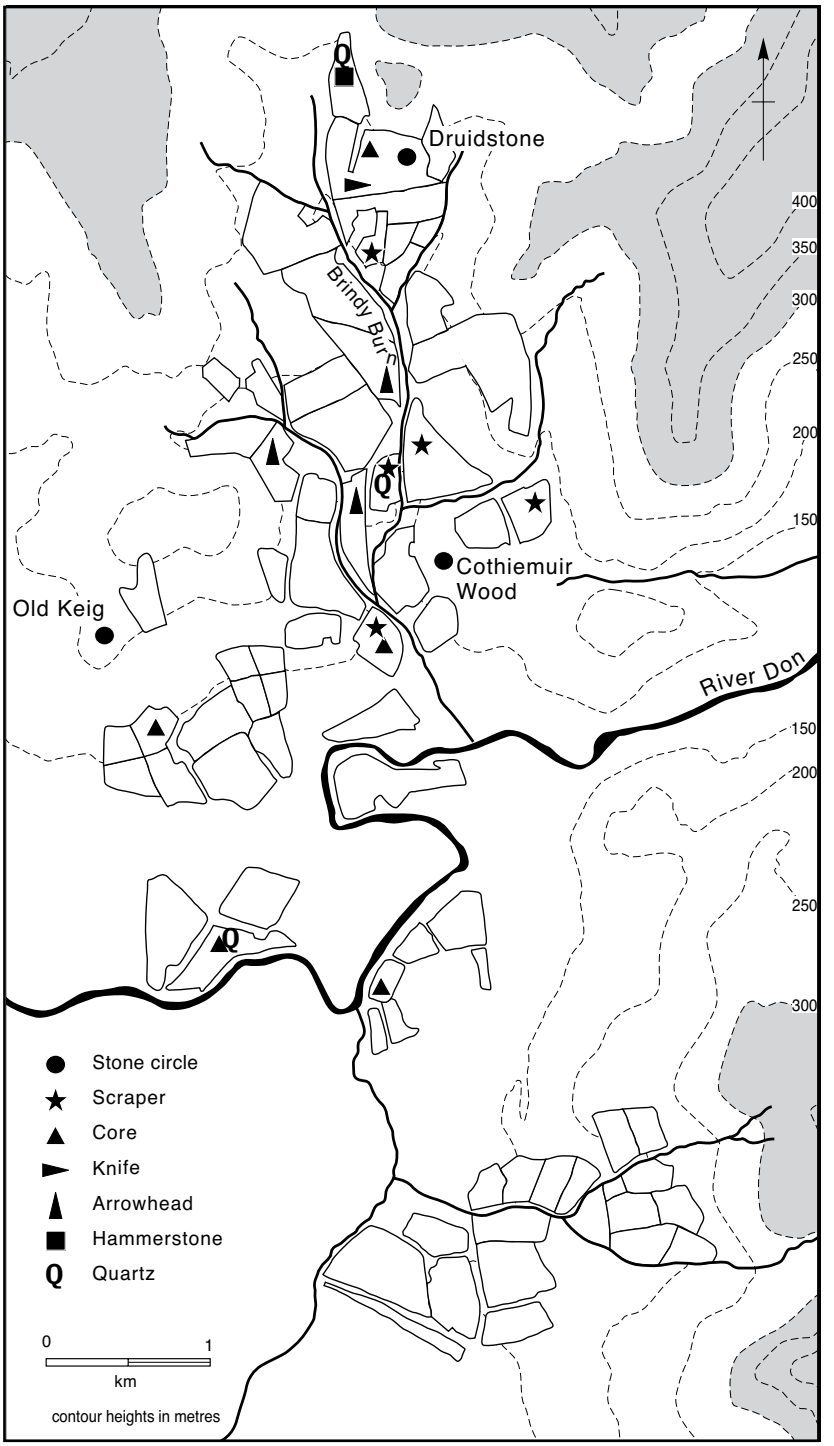


94 The extent of the Castle Forbes fieldwalking survey in relation to the distribution of artefacts and monuments previously recorded and showing the concentrations of lithic material identified in the survey. 1: Brindy West; 2: Brindy East; 3: Airlie; 4: Heughhead.

4.9 THE ARTEFACT ASSEMBLAGE

241 lithic artefacts were recovered. They are listed in Tables 21–4.

Roughly equal numbers of both flint and quartz artefacts were recovered. Most of the identifiable cortex on the flints was from beach pebbles, and pebble and outcrop cortex could both be recognised on the quartz. As at Tomnaverie, it would appear that flint was being brought from the coast, whilst local sources of quartz were being exploited. Natural pebble and outcrop quartz occurs on the middle slopes of the study area, but fewer were found in fields nearer to the River Don. One piece of worked quartzite and a piece of flaked quartz crystal were also recovered.



95 The distribution of diagnostic artefacts in the Castle Forbes fieldwalking survey.

The material had been worked in a similar way to the finds from the Howe of Cromar. There were few primary pieces, and the assemblage consisted mainly of secondary and inner material of both flint and quartz. The intensive working of flint is probably a reflection of the distance from the raw material sources. In the case of the quartz this may represent intensive exploitation, or it could result from the difficulty of identifying primary flakes in cultivated fields.

Natural quartz crystals of varying sizes were found in one part of the study area. They were noticed in the fields around the stone circle and along the Brindy Burn to the north. None was seen in the area to the south and the west. A particularly fine piece of crystal, which had been purposefully placed, was recovered from the excavation at the Cothiemuir Wood stone circle. The results of field survey suggest that it was locally derived.

Most of the worked flint showed similar flaking techniques to the material found in the Tomnaverie survey and excavation, as well as the two pieces recovered at the Cothiemuir Wood stone circle. It included a barbed and tanged arrowhead and a plano-convex knife (illus 96, nos 3 and 5) which would be of similar date to the stone circles (Clark 1932). A small number of artefacts may date from

Table 21 The raw materials used in the lithic assemblage from the Castle Forbes field survey.

Flint	116
Quartz	123
Quartzite	1
Quartz Crystal	1
Total	241

Table 22 The composition of the lithic assemblage from the Castle Forbes field survey.

Flakes	189
Blades & PBT*	16
Chunks	19
Chips	11
Cores	5
Quartz Hammerstone	1
Total	241

*PBT: Pieces possibly worked by blade technology

Table 23 The artefact assemblage from the Castle Forbes field survey.

Retouched	10
Utilised	7
Scrapers	5
Arrowheads	3
Plano-convex knife	1

Table 24 The representation of worked flint and quartz from the Castle Forbes field survey.

	Flint	**Quartz**
Primary	6	2
Secondary	60	41
Inner	50	80

the Earlier Neolithic period. Among them were a few blades, as well as two leaf-shaped arrowheads, one used and one partially made (illus 96, no 4). These arrowheads were isolated finds at a distance from the major densities of material.

Another group of artefacts recovered from the first terrace of the River Don showed a different flaking technique. These pieces had been roughly, almost expediently, worked and may date from the later prehistoric period. However, a settlement with seven hut circles probably dating to this time is recorded close to the Druidstone monument (NJ62SW6). No artefacts were found within the immediate vicinity of that site.

4.10 THE DISTRIBUTION OF SURFACE FINDS (ILLUS 95)

The higher densities of material were found in the fields on the lower and middle slopes between the 150m and 250m contours. In the valley of the Brindy Burn these tended to be the areas just above the stream. The one exception was a collection of lithic artefacts found on the first terrace of the River Don just below the 125m contour, but, as we have seen, this material was different from the rest of the assemblage recovered by fieldwalking. This was the only concentration of surface finds in any of the fields sampled along the banks of the river. The fields closest to the Cothiemuir Wood stone circle produced a low density of surface finds, although a general spread of worked material was recognised on the sloping ground 500m south of the monument. No artefacts were identified around the Druidstone stone circle. Over a ridge to the east of this site, where the land slopes down towards the Brindy Burn, there was a high concentration of material, but this area is visually and topographically separated from the monument. Similarly, there was very little material recovered from the areas around the locations of the two destroyed cists. The plano-convex knife was an isolated find from within 20m of the position of the ploughed-out cist above Druidstone. It may originally have come from a burial. Across the study area the distributions of worked flint and quartz were similar to one another.

The majority of the retouched and utilised pieces reflect the areas of highest artefact densities. They were scattered on the lower and middle

slopes between the 150m and 250m contours. These finds include cores and scrapers (illus 96, nos 2 and 6). The one exception is a flint core found on the first terrace of the Don. The leaf-shaped arrowheads were isolated finds, having little association with other lithic material. By contrast, the barbed and tanged arrowhead came from amongst a discrete cluster of material above Brindy Burn.

4.11 DETAILS OF THE MAIN CONCENTRATIONS

Four distinct concentrations of artefacts were recognised (illus 94). Three of these were on middle slopes to the north and south-west of the Cothiemuir stone circle, in the part of the landscape with the highest overall density of surface finds. All three of these locations faced into the sun. The fourth was an isolated, but distinct, group of artefacts beside the River Don to the south of Cothiemuir Wood. These clusters were well-defined and formed very noticeable concentrations in the field. Moreover, most of the land around them was walked so as to demonstrate their distinctive character. The Cothiemuir Wood stone circle is visible from all four 'sites', Old Keig from two of them, but Druidstone cannot be seen from any of these locations.

1. Brindy West (NJ 6135 2083)

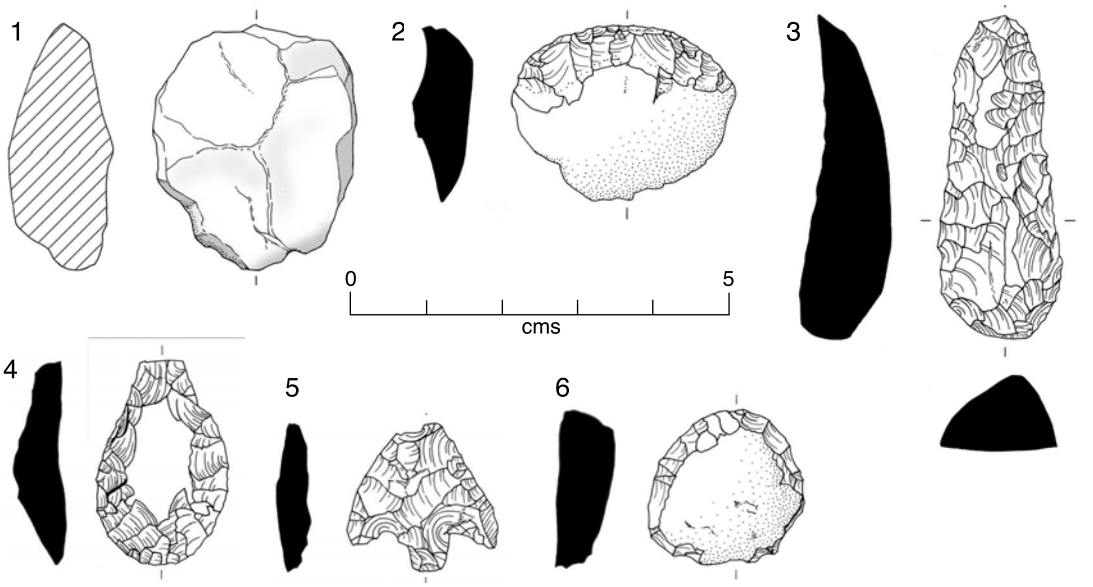
This site lies on the 175m contour about 1.25km north of the stone circle at Cothiemuir Wood. It is on a gentle slope above the Brindy Burn and overlooks what is now a drained wetland. The surface finds occur at the point where the stream valley opens out towards the River Don to the south. The scatter included a barbed and tanged arrowhead.

2. Brindy East (NJ 6163 2100)

This scatter is directly opposite the Brindy West site on the other side of the Burn. The concentration of material occupies a similar location. The assemblage included a large utilised flake covered in silica gloss.

3. Airlie (NJ 6070 1915)

This site is located just under 2km south-west of the Cothiemuir Wood monument, below Old Keig. A distinct concentration of artefacts was recognised on the 150m contour, on the edge of a spur. The distribution of artefacts may extend into the field to the east which was not ploughed. The location is south-facing and overlooks the flood plain of the Don. The artefacts included a flint core.



96 The lithic artefacts from the Castle Forbes fieldwalking survey. 1: quartz scraper; 2: flint scraper; 3: plano-convex knife; 4:unfinished leaf-shaped arrowhead; 5: barbed and tanged arrowhead; 6: burnt flint scraper.

4. Heughhead (NJ 6170 1720)
This concentration of material was found in a sheltered location beside the River Don, about 2.5km south of Cothiemuir Wood. The assemblage was characterised by an expedient technology and included a roughly worked core.

4.12 DISCUSSION

As at Tomnaverie, there were limits to the areas of land available for survey. Even so, the concentrations of material lie between 1.25km and 2.5km away from the stone circle in Cothiemuir Wood. Moreover, very little material was recovered from the fields closest to the site. The pollen report from the Cothiemuir excavation indicates a damp and marshy local environment with sedges and no evidence for cultivation. This area was 'improved' for agriculture in the nineteenth century when it was drained. The drainage ditches around the site can be 2m or more deep which is an indication of how wet it was in the past. It suggests that the settlement sites identified by fieldwalking were separated from the monument by an area of bog or marshland. The same applies to the stone circle at Druidstone. The higher densities of material were both visually and topographically separate from the monument. The two known cist burials were sited in prominent locations on the top of a ridge but, whilst their positions could be seen from the lithic concentrations, they were also detached.

The Cothiemuir Wood stone circle overlooks a large part of the floodplain of the Don. It is located at a critical point where the river flows eastward into a narrow gorge and the tributary Brindy Burn joins it from the north. In that sense the site seems to be on the edge of the landscape. To the east the land rises steeply to the foothills of Bennachie. This is a natural topographical boundary and also the point where two natural routeways meet: one going north and the other eastward. The results of field survey suggest that the monument was quite isolated, not just at this wider level but in relation to the micro-topography. Despite the apparent differences between the locations of the Tomnaverie and Cothiemuir Wood stone circles, the results of field survey suggest that there were important similarities.