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OF THE
UNIVERSITY OF CALIFORNIA
ARCHAEOLOGICAL RESEARCH FACILITY

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GREAT BASIN ANTHROPOLOGICAL PAPERS

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Department of Anthropology
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TABLE OF CONTENTS

I. ARCHAEOLOGICAL MATERIALS FROM A SITE IN THE BLACK ROCK DESERT OF NORTHERN NEVADA

Thomas R. Hester

The Black Rock Desert of northern Nevada (Fig. 1) has been brought to the attention of Great Basin archaeologists in recent years, largely through the efforts of C. W. Clewlow, Jr. (1968), who reported a variety of Paleo-Indian artifacts from the area. Unfortunately, the area has also attracted numerous relic collectors, and in a region such as this, where sites have been deflated, the great majority of artifacts are stripped away during a single surface-collecting episode.

Clewlow's reconnaissance in the Black Rock Desert led to the documentation of a number of surface sites. Recently, I examined over 200 lithic specimens from a separate locality, one apparently not recorded during Clewlow's survey, and it is the purpose of this paper to call attention to the site and to provide a brief description of the archaeological materials collected from it.

The site, as plotted by Jack Nicolarsen (Reno) is located on the eastern edge of the Black Rock Desert, between the east branch of the Quinn River and a local landmark known as MacFarland's Bathhouse. Clewlow (1968: Map 2) shows site NV-Hu-16 in this general vicinity, adjacent to County Road 49. However, the site reported by Nicolarsen lies to the west of Hu-16 and is adjacent to the Quinn River. The location of the site has not been field-checked and it is possible that there is some overlap with Hu-16, or possibly the larger site, Hu-17, which lies to the west between the two branches of the Quinn River (Fig. 1). The site is heavily eroded and littered with lithic debris, and is typical of sites in this area of the Black Rock Desert. Although the site is large, Nicolarsen could not provide specific measurements of the area covered by it. It has been designated as site NV-Hu-310 in the Archaeological Research Facility files at Berkeley.

The lithic sample from this site is best described as a "selective" one, as it was the primary objective of the collector to pick up projectile points (complete examples being favored over fragments) and other finished stone objects. The outstanding feature of the collection is the large number of "crescents" (the Great Basin Transverse type of Clewlow 1968, and Hester and Heizer 1973).

Because of the biased nature of the lithic sample only brief descriptions of the artifacts are given in this paper. Measurements and weights of the described specimens are provided in Table 1. Projectile point typology follows that of Hester and Heizer (1973). Illustrations of many of the specimens from the site are found in Figures 2-5. Photographs of the entire collection, along with other documentation, are on file at the Archaeological Research Facility, Berkeley.

Description of the artifacts from NV-Hu-310

The bulk of the collection consists of projectile points of the Elko and Pinto series (Fig. 2k-p). There are 106 specimens, primarily Elko Eared, Elko Corner-Notched, and Pinto Square-Shoulder varieties. There is considerable morphological intergrading within each series and marked overlap of attributes was noted between specimens in the Elko and Pinto categories. Because of these obvious typological problems, it was decided not to attempt to sort the specimens any further. For additional information on the occurrence of Elko and Pinto points in the Black Rock Desert, see Clewlow (1968).

In this sample of Elko and Pinto artifacts, one specimen was made of obsidian, and the rest of chert. One of the chert specimens appears to have been manufactured of thermally-altered material.

Four points of the Humboldt series are shown in Figure 2. Two of these are Humboldt Concave Base specimens (Fig. 2b, c). Both are made of obsidian and have parallel oblique flake scars on both faces. Two other specimens (Fig. 2d, e) are of the Humboldt Basal Notched variety. One is made of chert, is rather crudely flaked, and has a broad basal notch (Fig. 2d). The other (Fig. 2e) is carefully thinned and exhibits marginal trimming along one edge; it is made of translucent streaked obsidian.

There are 10 Northern Side Notched points in the collection (Fig. 2 h-j), all made of obsidian. Several exhibit double diagonal (chevron) flake scars on the body (Crabtree 1972: 87). Basal edges are concave to slightly concave, and side notches are deeply formed and are slightly oblique.

Other classifiable specimens include one Desert Side Notched point (Fig. 2t) of obsidian, two Eastgate Expanding Stem points made of chert (Fig. 2q-r), and a Rose Spring Corner Notched specimen, also of chert (Fig. 2s).

In Figure 3a, a', a fluted point is illustrated. This specimen is made of translucent variegated chert. The body of the point is marked by broad parallel flake scars and on both faces, the bases have been thinned by the removal of short, vertical flakes ("flutes"). There is dulling on the lower half of the lateral edges (see Fig. 3a).

Several lanceolate points are present. Two are bipointed (Fig. 2f-g); both are of obsidian and one has serrated edges. Two others are quite small (Fig 3b-c). One is of obsidian and the other of basalt; both have lateral edge smoothing. Another lanceolate specimen (Fig. 3a) resembles the Humboldt series. However, the lower lateral edges are recurved and are heavily dulled. Neat parallel flake scars characterize the body of the point. It is made of green obsidian.

There are two large triangular bifaces of gray chert in the collection (Fig. 4d, e). One of these (Fig. 4d) has a beveled lateral edge. Three other large bifaces

are also roughly triangular in outline, but two are side notched (Fig. 3f, g) and one has a rectangular stem (Fig. 3h). All three of these specimens are made of chert; one is heavily patinated (Fig. 3f) and another is probably fashioned from heat-treated chert (Fig. 3h). It is likely that all five of the large bifaces served as knives. The beveling on one edge of the specimen shown in Fig. 3d, probably represents resharpening of a dulled cutting edge. These knives were probably hafted on wooden handles (cf. Hester 1970, 1974). The two side notched bifaces and the rectangular-stemmed biface are quite similar to the hafted bifaces found at NV-Wa-197 (Hester 1974).

Two other large bifaces (Fig. 3i, j) are more crudely flaked. One is lanceolate in outline and the other is ovate; both are made of obsidian. These could have functioned as knives, but it seems more likely that they are unfinished pieces or preforms.

Two specimens can be termed awls or perforators. One is made of basalt, has a long bit, and an ovate base (Fig. 2u). Another (made of chert; not illustrated) has a short bit, is multi-notched, and was apparently made on a fragmentary Elko Eared point.

There are 66 "crescents" (Great Basin Transverse points) in the collections (Fig. 4, 5). These specimens have been used in statistical and breakage pattern studies by Mitchell, et al. (1976). However, a complete tabulation of measurements and weights of the large crescent sample from this site is provided in Table 2.

Most of the specimens are well made and have been carefully thinned, usually by the removal of a series of parallel (or parallel oblique) flake scars from both faces. Light dulling is often found near the center of the upper (concave) edge and dulling sometimes occurs in a corresponding area on the lower edge. This does not appear to be dulling resulting from use-wear, but rather from the deliberate grinding of an edge as seen on many kinds of Paleo-Indian projectile points. Many of the specimens are broken, often at the tips (see Mitchell, et al., 1976). On one specimen a burin is present at one tip (Fig. 3s); however, it is impossible to determine whether this is an intentional burin facet or one caused through impact. Crescents were apparently made directly on flakes (rather than from bifacial preforms). Usually, both faces of a crescent will be mostly flaked, although a portion of the original flake surface can still be seen. On some specimens, however, only minimal flaking was done to achieve the desired lunate form (see Fig. 3o, q, t; Fig. 4i).

A variety of raw materials were used in making crescents. Cherts predominate (61 specimens) but basalt (1), obsidian (2), quartz (?,1), and agate (?, 1) also occur. Among the cherts, variegated materials are most common (22), followed by gray (16), translucent light brown to golden (12), translucent white (4), variegated gray (2), and six specimens with a black patina which has formed over red/gold chert. Material of manufacture was not recorded for one specimen. Of the 66 specimens, three appeared heavily weathered or "sandblasted" and three others may be made from heat-treated chert.

Discussions regarding the function of Great Basin Transverse specimens (crescents) can be found in Tadlock (1966), Clewlow (1968), Butler (1970), Hester and Heizer (1973), Hester (1973) and Mitchell, et al. (1976). At the present, two major functional categories for these have been proposed. One hypothesis states that these are transverse projectile tips employed in hunting during the Western Pluvial Lakes Tradition. An alternate suggestion is that these implements were scrapers or knives, and Butler (1970) has cited wear pattern evidence in support of this postulate. Analysis of the present sample cannot validate or nullify either major hypothesis. However, none of the crescents in the sample exhibit (under macroscopic and microscopic scrutiny) any distinctive traces of use-wear. There are three specimens which have steep marginal retouch along an edge, and it might be argued that this represents the resharpening of a dulled cutting/scraping edge. There is dulling on many of the crescents (see a statistical summary in Mitchell, et al. 1976), but the dulling is clearly patterned, often found near the middle of the upper (and lower) edges. Microscopic examination suggests to me that the dulling is intentional and not the result of use; the restricted area within which the dulling occurs, plus the regularity of its occurrence, supports the suggestion that it is deliberate. It is tempting to speculate that the intentional dulling is reflective of the techniques used in hafting these artifacts, ostensibly as transverse points. However, in the case of dulling patterns, as well as with the nature of breakage patterns, it is probably better to await information from additional samples of these interesting artifacts (cf. Mitchell, et al. 1976).

One bit of negative evidence should also be noted. I have observed in several collections from the Black Rock Desert (including that of Clewlow 1968), distinctive "keeled", steep-bitted unifaces (called "gravers" by Clewlow).[1] The cultural affiliation of these artifacts is not clear, although they may be linked to the Western Pluvial Lakes Tradition. Although we have a wide temporal range of artifacts from this new site, no "gravers" are present in the assemblage. Perhaps this is due to sampling bias on the part of the collector.

Summary

This paper has provided descriptions of lithic materials collected from a surface site (NV-Hu-310) in the Black Rock Desert of northern Nevada. Apparently, this site was not recorded during earlier reconnaissance by Clewlow (1968). The artifacts include a fluted point, perhaps representing the Fluted Point Tradition hypothesized by Hester (1973) for the period of roughly 8000-10,000 B.C. The numerous Great Basin

1 I have examined a series of these keeled unifaces from the Black Rock Desert collection of Mr. R. Mudge of Winnemucca, Nevada. Examination of these under a binocular microscope (up to 75X) failed to reveal any traces of wear either on the "graver" tips or on the sides of the specimens. The absence of observable wear may be related to the fact that this tool forms seems to invariably be made on a very hard, coarse-grained chert, a material which would not be easily worn even with heavy-duty utilization.

Transverse points (crescents) at the site are diagnostic of the Western Pluvial Lakes Tradition (Bedwell 1970; Hester 1973) probably dating between 6000-9000 B.C. Some of the several lanceolate points from the site may also be from this early period (it should also be noted that fluted points are sometimes found in Western Pluvial Lakes Tradition sites; Hester 1973).

Most of the projectile points from the site are of the Elko and Pinto series, typical of the Great Basin Archaic (Hester 1973; the "Medithermal point series" of Clewlow 1968). A group of large triangular and stemmed bifaces from the site may also date from this time span, and may once have been components of hafted knives. Archaeological materials representing late occupations are notably sparse. Two Eastgate Expanding Stem points and a single Rose Spring specimen represent the Rose Spring-Eastgate Complex (or horizon). The final use of the site may be represented by a Desert Side Notched point. The paucity of arrow points at this site reflects a pattern noted by Clewlow (1968) at other Black Rock Desert localities. There was infrequent use of this portion of the desert basin during late times; according to Clewlow, most of the sites of this era are associated with springs. In fact, there seems to have been decreasing aboriginal utilization of the Black Rock Desert, from earliest times to late, perhaps reflecting the degeneration of the regional environment through a trend toward a very arid, desert situation.

This site can be seen as typical of the Black Rock Desert, and the lithic assemblage is comparable to that recorded from nearby NV-Hu-17 by Clewlow (1968). NV-Hu-17 was a multi-unit site, and it is possible that this new site (NV-Hu-310) is actually a portion of NV-Hu-17. In any event, it provides additional evidence of substantial early post-Pleistocene and Archaic occupations along the lower Quinn River drainage.

As noted at the beginning of this paper, the Black Rock Desert has been the focus of extensive artifact-collecting. There are apparently few (if any) buried sites, and erosional processes have exposed the contents of sites directly on the surface. Clewlow's survey of 1968 represents the major scientific study of the area to date. Many more data on the Black Rock Desert are undoubtedly to be obtained through the analysis of private artifact collections from the area, such as the Nicolarsen materials reported here. Since many of the Black Rock Desert sites have been so heavily despoiled, it would seem that the documentation of extant collections may be one of the few remaining avenues through which to study the archaeology of this region.

Table 1. Dimensions of Artifacts from Site NV-Hu-310.

Category	Number	Length	Width	Thickness	Weight
Elko-Pinto	106	29-67	18-28	3-6	1.3-8 7
Humboldt CB	2	55,46	19,16.5	6,6	5.9-4.5
Humboldt BN	2	61,49	25.5, 22	5,8	7.2-6.5
Northern SN	10	37-50	15-28	3.5-6	2.5-6.1
Desert SN	1	42	15	3	2.2
Eastgate ES	2	31,35	25,21	3,3	2.4,2.3
Rose Spring CN	1	37	12.5	5.5	2.3
Fluted	1	58	27	7	13.9
Bipointed lanceolate	1	55,50	19,16	5,6	5.0,4.4
Small lanceolate	2	35,32	15,13	4,4	2.2,1.9
Lanceolate, recurved	1	58	26	7	9.2
Large tri. bifaces	2	60,61	31,30	6,5	10.9,10.0
Large side notched bifaces	2	74,77	29,25	7,5	13.4,11.9
Large stemmed biface	1	59	27	7	8.1
Crude lanceolate biface	1	75	26	7	17.5
Crude ovate biface	1	57	35	8	13.7
Perforator	1	51	17	7	4.6
Perforator (reworked Elko?)	1	33	28	4.5	3.1

All measurements are in millimeters and weights are given in grams.
Maximum measurements are indicated.

Table 2. Dimensions of Great Basin Transverse Points ("Crescents") From Site NV-Hu-310.

Length	Width	Thickness	Weight
56	22	6	9.1
*68	24	6.5	11.0
55	22	6	7.8
63	19	6	7.7
56	22	6	7.7
44	23	6	8.3
*59	22	6.5	10.0
59	22	6.5	10.6
42	18	6.5	5.6
48	21	6	7.3
*44	21	5	5.8
55	24	7.5	10.0
52	19	4.5	5.4
*37	15	5	2.5
*42	19	5	5.2
52	22	5	6.8
*52	21	7	9.4
55	21	6.5	7.4
54	20	6	5.8
*44	22	5	5.6
46	22	8	8.4
*58	22	6	8.5
*56	20	6	7.0
36	16	4.5	2.7
*48	26	5	8.2
58	18	8.5	6.5
*53	20	6	7.3
61	21	5	6.5
52	23	7	9.5
49	21	5	5.5
*42	19	6	5.5
*46	18	5	4.8
*57	23	5	7.6
*48	20	5	5.4
54	19	4.5	6.0
*57	23	5.5	9.2
44	20	3.5	3.3
55	21	5	6.1
54	22	6	7.8
44	17	5	5.1

Table 2. (Continued)

Length	Width	Thickness	Weight
44	17	5	7.8
36	13	4	2.2
*47	19	5	6.1
*54	20	6	7.3
*50	20	5	5.4
*33	12	4	1.9
42	18	4	4.0
*50	18	3	3.7
46	16	6	4.9
*43	18	5	4.4
*44	18	6	5.1
*51	18	6	4.7
*53	24	6.5	10.3
51	21	5.5	5.8
40	16	5	3.9
*38	15	4	3.0
35	13	4	2.0
*34	13	4	2.5
53	20	5	7.0
58	22	7	10.5
*49	23	5.5	8.3
56	18	6	6.7
45	21	3.5	3.8
*38	20	5	6.0
53	17	6	6.2
51	19	5	5.0
*43	23	5	6.1

Measurements are in millimeters and weight, in grams.
Asterisks (*) indicate fragmentary specimens.
Following Clewlow (1968), length is measured along the longest axis of the specimen.

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The Black Rock Desert area and major archaeological sites (after Clewlow 1968). Sites are shown as open circles, with the exception of site NV-Hu-310 which is indicated as a hachured circle.

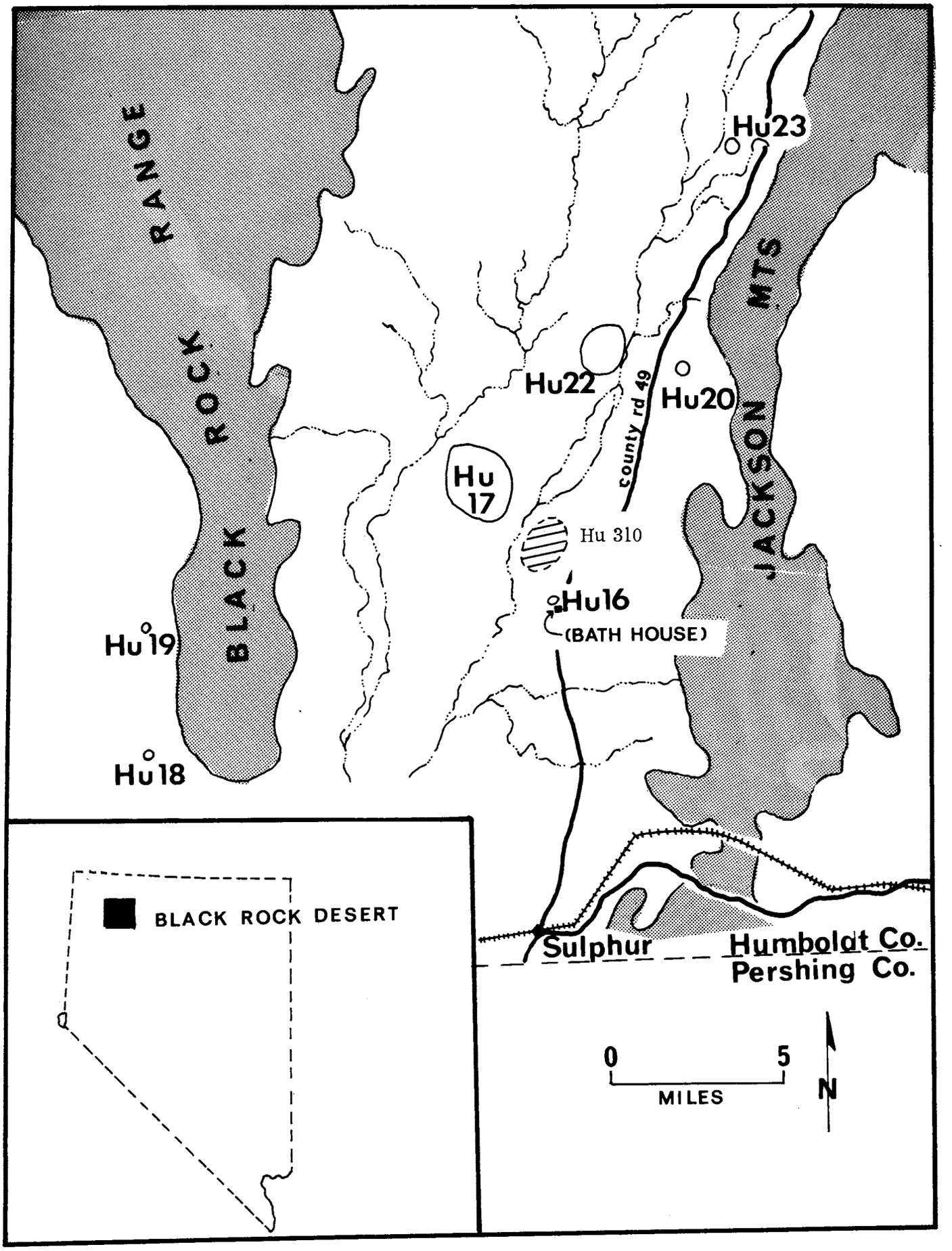

Figure 1.

Artifacts from site NV-Hu-310. a, lanceolate point; b, c, Humboldt Concave Base point; d, e, Humboldt Basal Notched point; f, g, lanceolate points; h, i, j, Northern Side Notched points; k-p, Pinto and Elko series points; q, r, Eastgate Expanding Stem points; s, Rose Spring Corner Notched point; t, Desert Side Notched point; u, perforator.

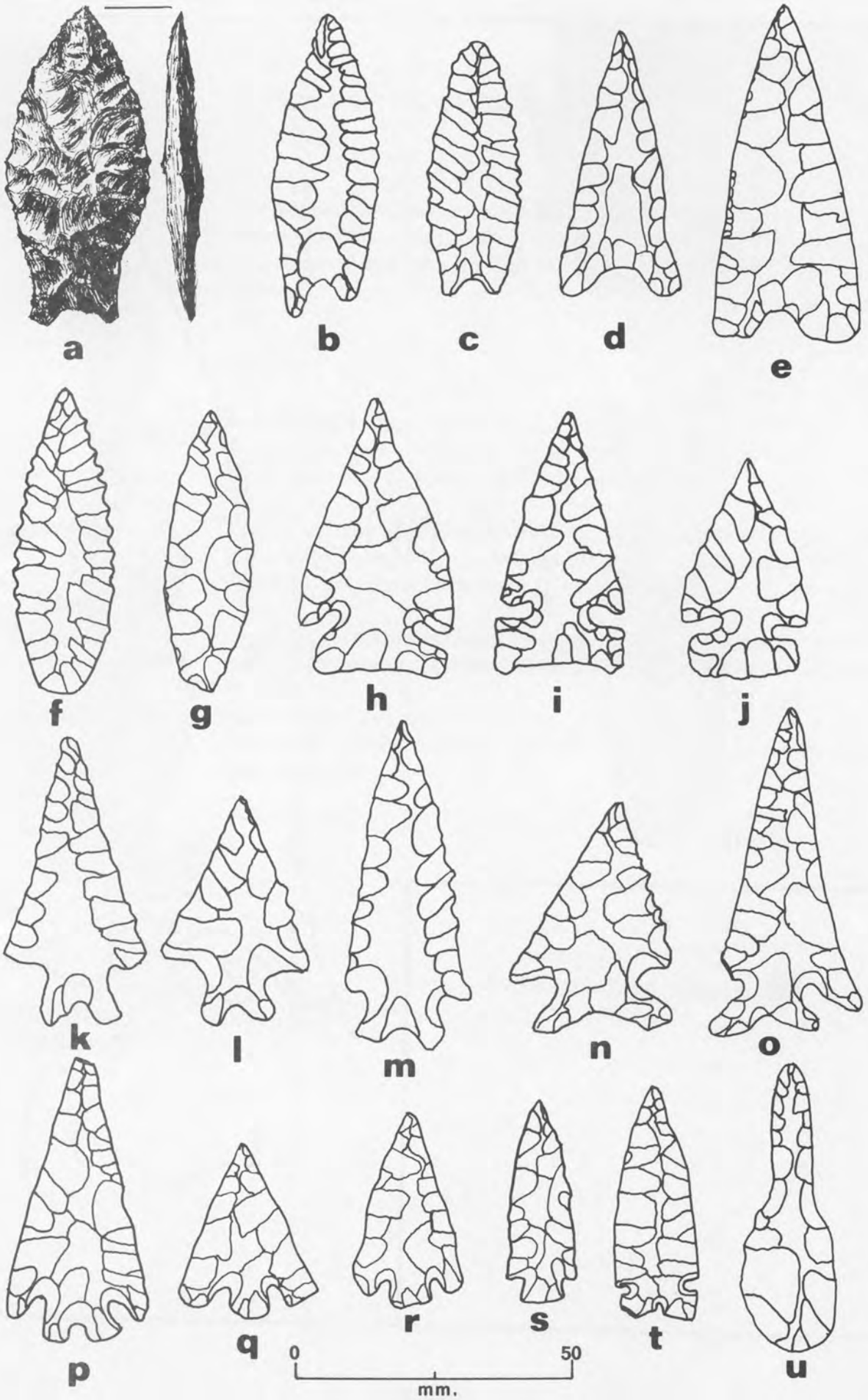

Figure 2.

Artifacts from site NV-Hu-310. a, a', fluted point; b, c, small lanceolate points; d, e, triangular bifaces; f, g, side notched bifaces; h, stemmed biface; i, lanceolate biface; j, ovate biface.

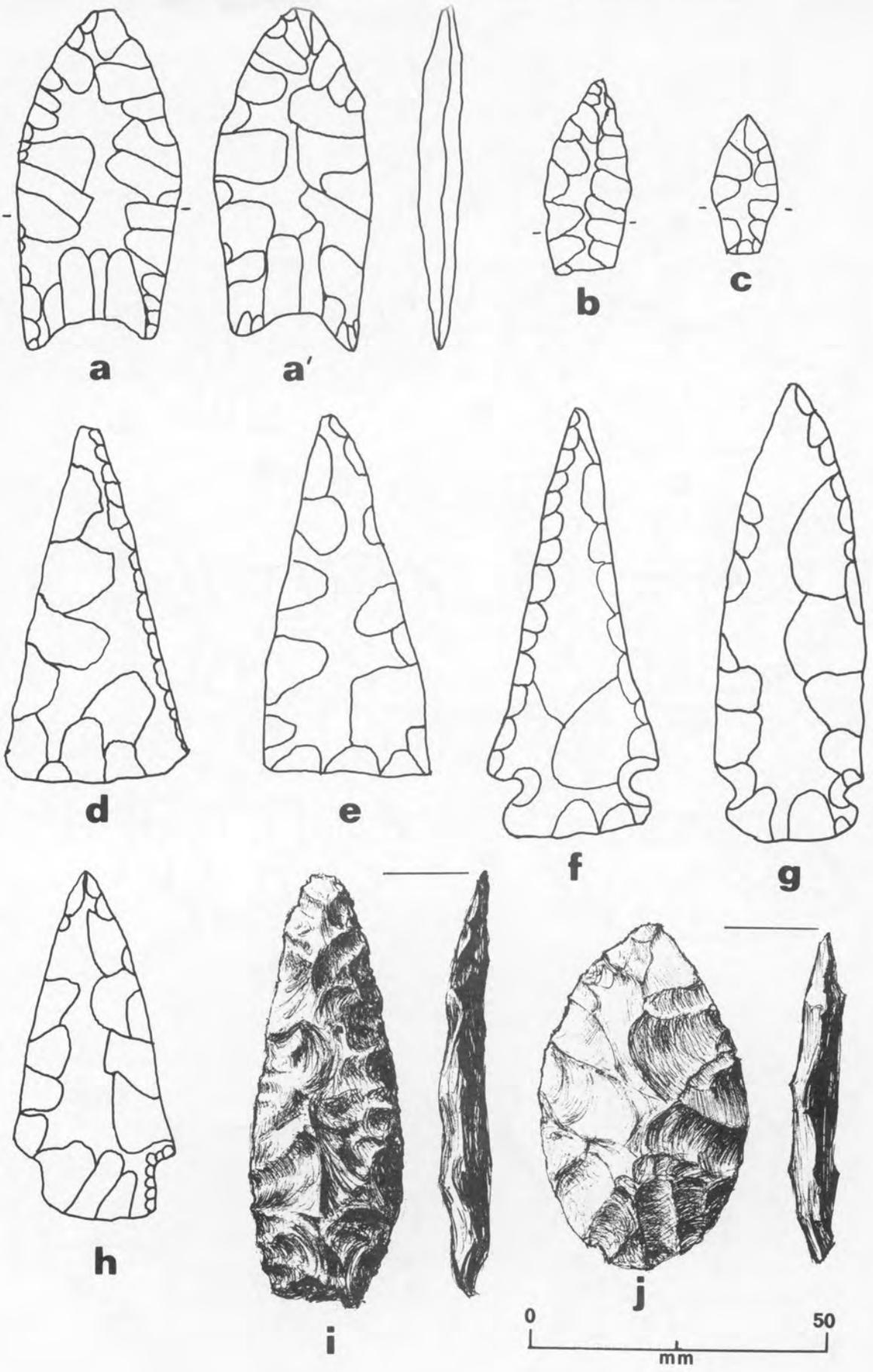

Figure 3.

Great Basin Transverse points (crescents). Darkened areas represent breaks. Dashed lines indicate dulled areas on edges.

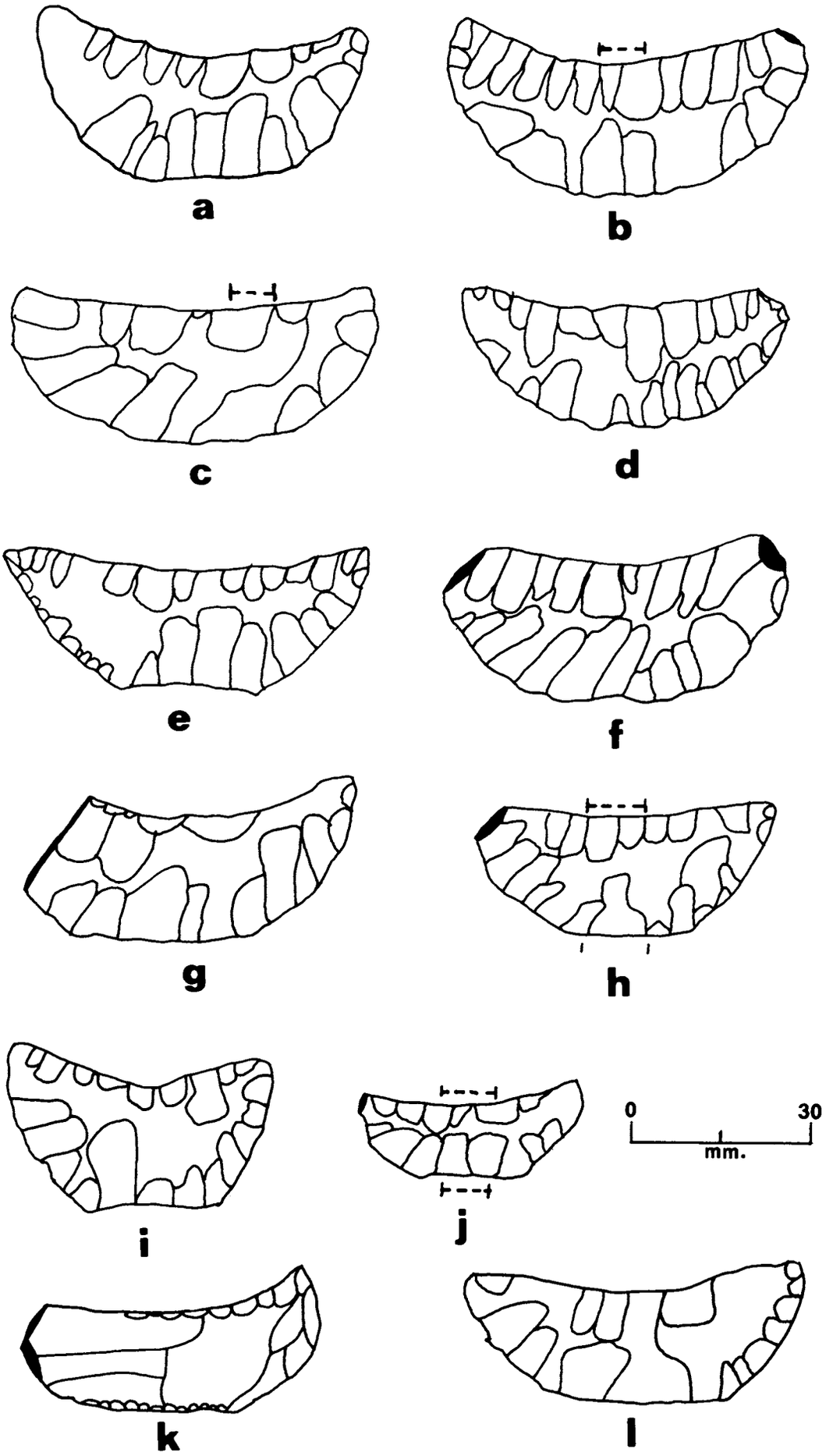

Figure 4.

Great Basin Transverse points (crescents). Darkened areas represent breaks. Dashed lines indicate dulled areas on edges. Note burin on s.

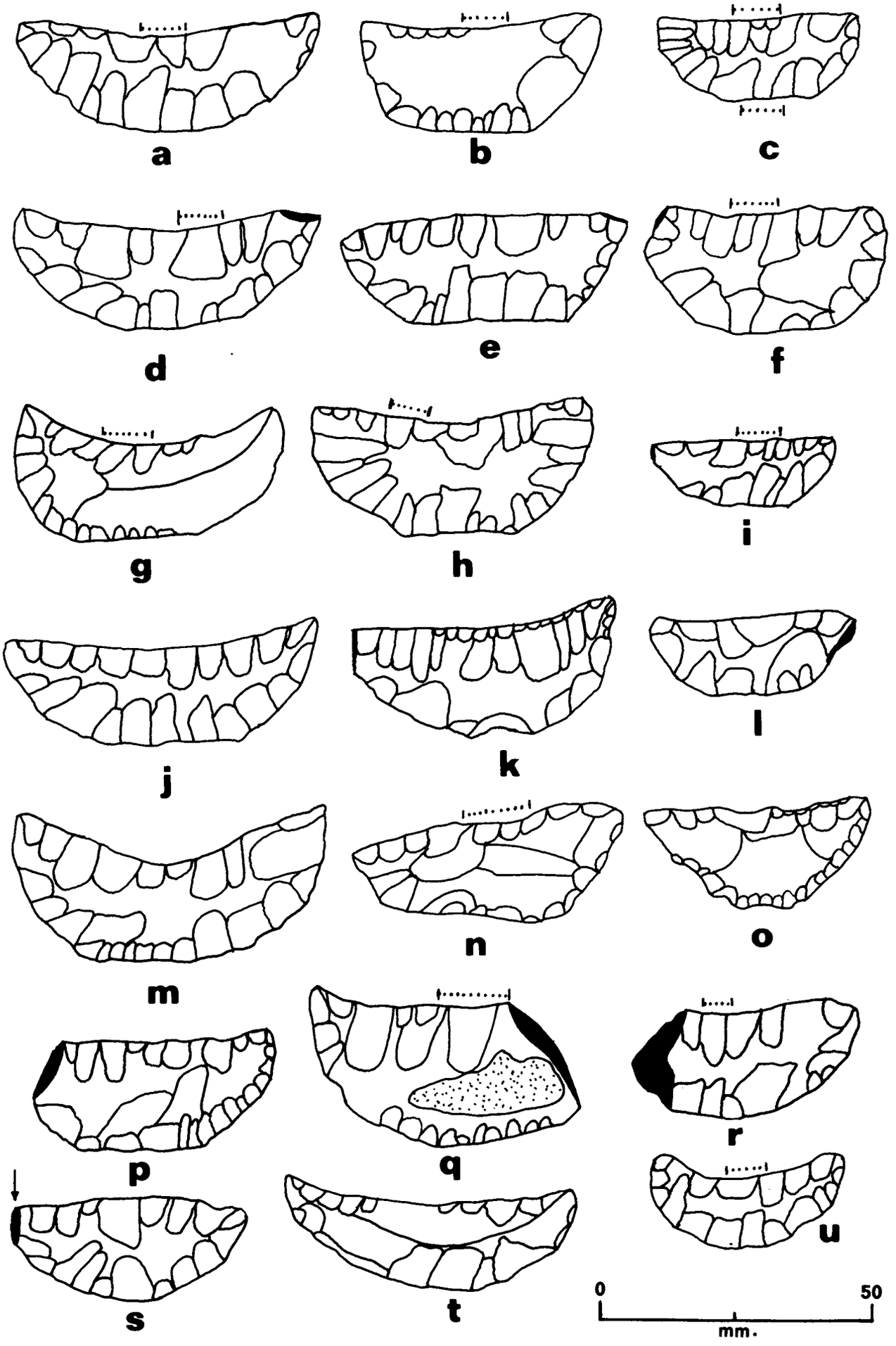

Figure 5.