Environment

The implements of this assemblage are sparsely found in the region. Some of them are collected from the river basin at the confluence of the rivers Manjra-Beraonj, near Narada-Sanges and from the ancient habitation sites with the cultural remains of neolithic, early historic etc. A few elongated bladish tools are found in the Middle Palaeolithic factory site near Narada-Sanges. A factory site is located in a cultivated black cotton field near Ballur in Aurod taluk on the northern region of Bidar (i.e., northern part of the Manjra valley). As mentioned in Chapter I, Part I at the appropriate place most of the implements are bladish flakes. The rock material which was necessary for preparing the implements is available in the areas which is also referred to in Chapter I, Part I at the appropriate place.
Numerous bladish flakes, rejected blades, etc., are found in the factory site at Ballur in ploughed black cotton soil. Most of them are made on coarse jasper and its varieties. Not far away from the site the basin of the river Manjra are here and there exposures of coarse jasper that could have been exploited for manufacturing the tools. Apart from this the nearest source of the rock material as far as my knowledge goes is Hingna. This locality is about 15 km north-west of Ballur. It is interesting to note that in and around the site at Ballur are found scattered varieties of flat nodules or cylindrical pebble cores, lumps of coarse jasper and numerous waste flakes which are the resultant product. Most of them are handy in size.

Density

As there is only one factory site, has been located at Ballur (in Auruad taluk) and tools of this cultural assemblage in very small number in the other sites having a cultural remains of other periods. The distribution of the bladish tools etc., collected from a factory site and the ancient habitation site ranging
from neolithic to early historic periods is given in table No. 1. It is therefore at present not possible to estimate the density of the people settlement in the region. This of course is not peculiar to this region. The very identification of this stage in a very few areas like Bellabahav in Chitter district (Andhra Pradesh) (Murthy, M.K.; 1970; pp. 106-126) etc., is recent. Consequently although a few Upper Palaeolithic sites in different regions are noticed like Bellabahav area in Karnataka (Paddayya, K.; 1970; pp. 165-190), Satte region in Maharashtra etc., (Sankalia, H.; 1974; pp. 226-229), in view of their occurrence in very small number in a few areas if there is an Upper Palaeolithic stage at all in India is a problem. Hence at the moment no comments are possible regarding the density of the habitation in the region under study.

Tool Types and Their Characteristics (Plates 2 and Fig. III and IIIa)

The finished bladich flakes of the assemblage are too meagre in the collection both from the factory site and from the other sites. Most of them are edge tools. The tools comprise single and double edged blades or transverse edged blades, lateral-cum-transverse edged blades and burin (?) The remaining artefacts are
irregular bladish flakes, rejected bladish flakes, chips, lumps etc. The edged and non-edged blades are distinguished on the basis of the nature of the working edge of the blade. Generally the working edge is always on the margin or lateral edge of the specimens. Some of them typologically and functionally would fall into scrapers. The selected bladish tool types and their characterization are described below.

1. From Dallur: A rectangular bladish core. Has faceted platform. The bulb of percussion has been nipped with flake scar on the ventral surface, roughly parallel sided margins having slight retouch marks at the distal end from the dorsal surface. Coarse Jasper.

2. From Madagao Deshouth: An elongated bladish flake. Has faceted platform at the base and a plain platform at the tip. The bulb has been nipped on the ventral surface. Has deep notches at one margin from the ventral and deep chippings vertically at the other margin as well as at the distal end. Lateral-umb-transverse edged blade. Cortex retained partially at the base on the dorsal surface. Jasper.
3. From Manjapur: A thick bluish flake. Has narrow platform at the bulbar end; bulb of percussion with flake scar on the ventral surface; traces of retouch marks within deep notches made from ventral surface at one margin and the other margin from the dorsal and also obliquely at the distal end; a prominent midrib (curved) on the dorsal surface. The distal end is curved into a point that is broken. Greenish Jasper. (Fig.III, No.12). Comparable roughly to a tool of Renigunta. (Murthy, M.K.; 1970: Fig. 17, No. 3, p. 18).

4. From Ballur: A very thick elongated bluish flake broken across. Has a bold ridge and deep slony margins on the dorsal; a series of deep notches having secondary retouch marks at one side. Yellow Jasper. Patinated tool. (Fig.III, No. 4).

5. From Bulyal: A thick large elongated bluish flake. The prominent bulb has been nipped with flake scar on the ventral. Has slony sides with a ridge; elongated fluting marks at one margin and flake scar marks on the dorsal; traces of deep notch mark at one margin and steep chippings at the other end also at the distal end. Chalcedony. Has lime encrustation here and there. (Fig.III, No. 1).
6. From Nūrān robotics: A miniature flake. Has plain platform at the base; bulb of percussion and a flake scar with ripple marks on the ventral surface; a series of retouch marks at one margin from ventral surface near the distal end and irregular chippings at the other margin. Notches at one margin and chippings at the other. The distal end has short pointed tip at one side. Jasper. (Fig. IIb, No. 11).

7. From Nūrān robotics: An elongated thin blade broken across. Has narrow faceted platform at the bulbar end. Has retouch marks within a series of notches at one margin made from the dorsal and the ventral and chipped at the other margin. Has midrib on the dorsal surface. Exceedingly shining glossy surface. Carnelian. (Fig. IIIb, No. 8).

8. From Kettimukkūnā: A thick elongated bifacial flake. Has plain platform; bulb of percussion nipped and with flake scar on the ventral surface. Has one of deep notches from the ventral at one margin and irregular retouch marks at the other margin and obliquely at the distal end; prominent midrib, deep with slopy sides and flake mark on the dorsal. Exceedingly shining glossy surface. A short thick unfinished point like a
back at one side of the distal end. Jasper. (Fig. III, No. 5).

9. From Hamadpur: A slightly curved bladish flake. Has an indistinct faceted platform; irregularly chipped at the margins and the distal end; a prominent midrib with sloping sides on the dorsal. Chert. (Fig. III, No. 6).

10. From Hamadongam: An elongated thick bladish flake roughly triangular in section. Has broad faceted platform; retouch marks within a series of notches at one margin and irregular chippings deeply at the other margin and at the broken distal end. Chalcedony. (Fig. III, No. 5).

11. From Ballur: A thick single edged blade triangular in section. Has an indistinct faceted platform; steep irregular nibbling marks at the thick margin, sharp at the opposite side with slight retouch marks and irregular flake scars on the dorsal surface. Greenish Jasper. (Fig. IIIa, No. 7).

12. From Ballur: An irregular single edged blade. Has plain platform. Irregular fluting marks towards the
distal end at one side and steep chippings at the same margin near the base and also at the other margin near the other end. Yellow Jasper. (Fig. III, No. 10).

13. From Nārada-Sangāi: A thick elongated burin triangular in section. Has plain platform, prominent midrib with deep sloping margins having traces of retouch mark at one margin and at the oblique distal and towards the one side of the pointed end. Has shallow percussion on the dorsal surface and ripple marks at one margin. A burin (?). Carmelian. (Fig. III No. 2).

14. From Wānarpalli: An irregular thick flake. Has flat platform at one end and fluting marks meeting at one side of the distal end. It may be an unfinished burin (?). Has elongated fluting at one margin. Banded Jasper. (Fig. III No. 9).

15. From Bellūr: A massive curved bladish thick flake triangular in section. Has plain platform at the bulbar end, bold ridge and steep sloping margins. Banded Jasper.
16. From Hajjargi: An elongated roughly parallel sided, medium sized blade. Has nipped bulb of percussion with ripples on the ventral; narrow platform, prominent midrib with sloping sides, a series of indistinct broader vertical flutings on one margin and the other plain. Has worn-out margins. Jasper.

**Technique**

Most of the artefacts of this assemblage are blade flakes. They are characterised by long but thick with straight working edge and roughly parallel sided or irregular margins and a prominent midrib on the dorsal surface, sometimes triangular in section. They are mostly made on coarse jasper and rarely chalcedony, carnelian, etc. The tools are made on blade flakes. Most of the finished blade tools exhibit deep notch usually at the one margin having retouch marks. The blade nature of the tools of the assemblage suggest that these blades are mostly prepared by blade tool technology or fluted core technique as noticed elsewhere for example in Shērapur area (Bhadraya, 2; 1970: p. 170), Renigunta area (Murthy, M.L.K.; 1970: p. 108). The blade tools are usually characterised by length-wise parallel flaking on the dorsal surface. Some of the blades are
very narrow suggesting that these could be detached by pressure technique or also by means of indirect percussion method.

The secondary retouch marks had been obtained by probably pressure punch method and the steep working edge of the bladish flakes could be prepared by pressure flaking method with light cylinder hammer.

General Observations

The margins are roughly parallel. Prominent bulb of percussion is not common among the collections. But ripple marks round the flake scar on the ventral surface is generally visible. The striking platforms are plain; rarely faceted. The prominent or bold ridge on the dorsal surface with steep sloping sides are also common features. The finished tools are a few in number. Occasionally tools: here and there may have cortex retained but of negligible area. In the collections the tools are very few in number when compared to the numbers in the collections of the preceding culture tools. A few of them are coated with lime encrustation coating patination and succeeding shining glossy surface.
The typology of the tools of the assemblage indicates that an incipient blade tool technology did appear in this region also.

Some of the tools are comparable to those of the Upper Palaeolithic industries in Sallakalava, (Karaigunta), Vemula area (Andhra Pradesh) and Shurapur Soab area (Karnataka).
Fig. No. III: Nos. 1, 3, 4, 5&6, Blades (Hulyal, Mettimelkunda, Ballur, Mandapur, Mahadongaon); 2, Burin (Narada-Sangam).
Fig. No. IIIa: Nos. 7, 8, 10, 11 & 12, Blades (Ballur, Narada-Sangam, Mandapur & Wanzarpalli); 9, Surin (Wanzarpalli).