ARCHAEOLOGICAL SURVEY IN THE LONG TOM SUB-BASIN,
UPPER WILLAMETTE VALLEY, OREGON

By
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Report to the
State Historic Preservation Office
Parks and Recreation Branch
Oregon State Department of Transportation
Salem, OR 97310

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The Long Tom Archaeological Survey was carried out under a research contract authorized under Public Law 89-665 between the Oregon State Historic Preservation Office and the Oregon State Museum of Anthropology, University of Oregon. Drs. Don E. Dumond and Rick Minor, and Kathryn Anne Toepel, a doctoral candidate in Anthropology, served as Co-Principal Investigators for this project. The responsibility for the development of the research design, the management of the field survey, and the preparation of this final report was the responsibility of the author throughout the project.

Fieldwork for this project was conducted primarily between February 1983 and June 1984. James B. Cox and Sara Scott served as field directors and provided invaluable assistance in keeping track of the numerous landowners and survey tracts within the project area. The following students provided their time and energies during the survey:

- Robert Bryson
- Jill Chappel
- Pamela Endzweig
- Mark Freemesser
- Jane Robbins
- Thyme Siegel
- Mark Swift
- Judith Willig

The assistance of Rick Minor in all phases of this project is gratefully acknowledged by the author. The artifact drawings were drafted by Pamela Endzweig.

Deepest thanks go to the many landowners who opened their lands and artifact collections to the survey crews. Without their cooperation, this project would have been impossible.

The field notes and artifact collections obtained during this project are stored at the Oregon State Museum of Anthropology at the University of Oregon.
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INTRODUCTION

This report describes the methodology and results of a large-scale survey for cultural resources carried out within the Long Tom Sub-basin in Lane County, Oregon. The survey was carried out in 1983 and 1984 by archaeologists from the Oregon State Museum of Anthropology under a Survey and Planning Grant awarded by the Oregon State Historic Preservation Office.

The project area consists of privately-owned lands located west and north of the city of Eugene (Figure 1). The project area is 168 square miles in extent, measuring 12 miles north-south by 14 miles east-west, the bulk of which is in T16-17S, R4-5W. It is bounded on the east by the Willamette River and the city of Eugene, and on the west by the eastern foothills of the Coast Range. This area was selected for survey for five main reasons:

1. It encompasses a range of physiographic and vegetational settings, differences in the environment which were presumably considered by the prehistoric inhabitants when selecting locations for settlements.

2. Several of the more important archaeological sites investigated to date in the Willamette Valley are located within or very near this area (specifically, the Lingo [35LA29], Benjamin [35LA41-43] and Flanagan [35LA218] sites). It was expected that the survey results would help to establish the prehistoric contexts of these important sites in relation to other prehistoric settlements in the area.

3. For the most part, the area has not been previously surveyed
Figure 1. Location of Long Tom Sub-basin project area northwest of Eugene, Oregon (USGS Salem quadrangle, 1963, 1:250,000).

in a systematic manner and it undoubtedly contains a large number of archaeological sites.

4. A look at the distribution of Kalapuya Indian groups at the time of historic contact (Figure 2) indicates that, in most cases, each group occupied its own sub-basin within the Willamette Valley. In turn, each sub-basin offered a range of riverine, lowland and upland environments containing different subsistence resources. In view of this observation, it seems more meaningful to begin to examine
Figure 2. Distribution of Long Tom band of Kalapuya in the Willamette Valley (project area is shaded; from Toepel and Beckham 1981:56).
aboriginal subsistence and settlement patterns within each of the separate sub-basins, rather than attempting, as White (1975a) did, to propose a model applicable to the Willamette Valley as a whole (Minor and Toepel 1981:147).

5. It is an area of urban growth gradually being developed into residential subdivisions and commercial complexes. Such developments generally result in the destruction of archaeological resources. In view of the project area's urban location, it was hoped that the results of this study would be of some use to land use planners involved in making decisions about future development of this area.

ENVIRONMENTAL SETTING: LONG TOM SUB-BASIN

The project area is centrally located in the Long Tom River sub-basin (Figure 3). The Long Tom River drainage is located in the Upper Willamette Valley and is bounded on the west and south by hills of the Coast Range. No clearly defined physical features determine the northeastern boundary which separates the sub-basin from the McKenzie and Muddy Creek watersheds. The Long Tom sub-basin encompasses approximately 526 square miles (1362 km$^2$ or 336,600 acres) in extent.

The sub-basin can be divided into the flat alluvial plain forming the northeastern part and the hills which make up the rest. The former, which contains most of the level or relatively level land in the entire Upper Willamette Basin, varies in elevation from 120 meters at the southern end to 75 meters at the northern end of the sub-basin. The area to the south and west of the alluvial plain is a region of gently rolling to moderately rough topography. Ninety-five percent of the sub-basin area lies below 300 meters and consists of lands having a flat or moderate gradient. The remaining five percent has elevations of 300 meters or more and consists of steep or relatively steep land.
Figure 3. Location of the Long Tom hydrologic sub-basin in the Upper Willamette Valley (project area is shaded; from Oregon State Water Resources Board 1967:8).
Approximately 70% of the sub-basin is drained by the Long Tom River and its tributaries. Coyote Creek is the largest of the tributaries, having a watershed of about 2600 km². Other tributaries of significance are Amazon, Bear and Ferguson creeks. All streams in the Long Tom system originate in the Coast Range. Most of these are characterized by flat gradients. About 65 km of the main stem of the Willamette River meanders along the northeastern boundary of the sub-basin and abuts on the northeastern corner of the project area as well. A number of intermittent streams flowing parallel to the Willamette main stem drain the flat lands on the valley floor. The largest of these, Flat Creek, joins the Willamette near Monroe. Nearly one-third of the sub-basin is drained by such minor tributaries directly into the main stem. There are in all about 1100 stream kilometers of which about 500 km are perennial streams.

In addition to information available on the environment and geomorphic surface in the project area from various sources (e.g., Zimmerman 1927; Baldwin and Howell 1949; Balster and Parsons 1968), data on the natural contact-era vegetation has been previously reconstructed for the project area in a study by Johannessen and others (1971).

PREVIOUS INVESTIGATIONS

Although ethnographic records contain almost no reference to the Kalapuya groups living in the vicinity of Eugene at the time of historic contact, it is likely that the area was occupied by the Long Tom Creek group, also called the Chelamela. This group, mentioned in Hodge (1907:242), is noted simply for occupying the banks of Long Tom Creek (now Long Tom River) on the west side of the Willamette River (Figure 2). Berreman (1937:22) was inclined to consider them another band of the Calapuya proper because of the general lack of reference to
this group, which is not mentioned in any of the later historic treaties.

The history of archaeological research within the project area is well told by the site forms for the 45 previously recorded sites in the area (Table 1). The first archaeological work of substance within the present project area was conducted by Laughlin and Collins in 1950 at the Perkins Peninsula site (35LA282) at Fern Ridge Lake. This work was reported by Collins (1951) in the first synthesis of Willamette Valley prehistory. Archaeological investigations did not begin in earnest in the project area, however, until 1967 and 1968 when the University of Oregon sponsored the summer field school at the Benjamin sites (35LA41-43). Previous years (1965-1966) had been spent at the Lingo site (35LA29) immediately north of the project area (Cordell 1975).

Site forms were apparently not filled out for previously excavated sites until 1970 when archaeological survey work began in the area. At that time, Southard and Woodward led surveys for the University of Oregon with the purpose of recording sites in the Upper Willamette Valley (Southard 1970, Woodward 1970). The methodology used in locating sites during these early projects is not always clear, but most of the surveys appear to have been generally based on informant information rather than on systematic field survey. Twelve sites were recorded within the project area at this time.

A later survey in 1973, known as the Flat Creek Survey, was carried out by Oregon State University for the National Park Service and resulted in the recording of five sites in the area (Piontkowski et al. 1974). Another University of Oregon field school was concentrated on the Flanagan site (35LA218) and two adjacent scatters (35LA242, 243) in 1975, 1976 and 1978 (Toepel and Minor 1978). The contract archaeology program at the University of Oregon was responsible for the recording and/or excavation of additional sites, primarily in the Fern Ridge
### Table 1. Summary of previously recorded archaeological sites within the project area.

<table>
<thead>
<tr>
<th>Project/Site Location</th>
<th>Extent (m)</th>
<th>Recorder/Date</th>
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<td><strong>Benjamin Sites (Miller 1975):</strong></td>
<td></td>
<td></td>
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<tr>
<td>35LA41 16S 5W 27 345' LGS P/A 25 x 25</td>
<td>Peterson 1974</td>
<td></td>
</tr>
<tr>
<td>35LA42 16S 5W 27 345' LGS P/A 15 x 60</td>
<td>Peterson 1974</td>
<td></td>
</tr>
<tr>
<td>35LA43 16S 5W 27 345' LGS P/A 20 x 20</td>
<td>Peterson 1974</td>
<td></td>
</tr>
<tr>
<td>35LA71 16S 4W 13 345' LS P/O 65 x 100</td>
<td>White 1970</td>
<td></td>
</tr>
<tr>
<td>35LA72 16S 4W 13 345' LS P/O 20 x 100</td>
<td>White 1970</td>
<td></td>
</tr>
<tr>
<td>35LA73 17S 5W 12 370' LS P extensive</td>
<td>White 1970</td>
<td></td>
</tr>
<tr>
<td>35LA74 17S 5W 1 360' LS P 75 x 500</td>
<td>White 1970</td>
<td></td>
</tr>
<tr>
<td>35LA75 17S 4W 10 385' LS P 200 x 300</td>
<td>White 1970</td>
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</tr>
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<td>35LA76 17S 4W 10 385' LS P/O 200 x 300</td>
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</tr>
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<td>35LA77 17S 4W 10 380' LGS P/O 200 x 200</td>
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<td></td>
</tr>
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<td>White 1970</td>
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</tr>
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<td>35LA80 16S 5W 22 355' LS P/A 30 x 30</td>
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<td>35LA147 16S 4W 13 340' LS P/H 150 x 400</td>
<td>Southard 1970</td>
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<td>35LA170 17S 4W 11 380' LGS P/O 30 x 30</td>
<td>Fortner/ Southard 1969</td>
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</tr>
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<td>35LA197 16S 5W 28 350' LS P 20 x 30</td>
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<td><strong>Flat Creek Survey (Piontkowski, Brauner and Davis 1974):</strong></td>
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<td>35LA204 16S 4W 9 330' LS P 30 x 30</td>
<td>Piontkowski/ Francey 1973</td>
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<td>35LA205 16S 4W 9 335' LGS P 60 x 300</td>
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<td>Piontkowski/ Francey 1973</td>
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<td><strong>Flanagan Site (Toepel and Minor 1980, Toepel 1985):</strong></td>
<td></td>
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<tr>
<td>35LA218 17S 4W 17</td>
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<td>35LA242 17S 4W 17</td>
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<td><strong>1978 Fern Ridge Survey (Minor 1978):</strong></td>
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<td>35LA280 17S 5W 30</td>
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<td>35LA281 17S 5W 35</td>
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<td>365'</td>
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<td>35LA356 16S 4W 34</td>
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</tr>
<tr>
<td>35LA357 16S 4W 35</td>
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<tr>
<td>35LA358 16S 4W 35</td>
<td>370'</td>
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<td><strong>ODOT Noti-Veneta Highway Project:</strong></td>
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<td>35LA439 17S 6W 35</td>
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<td>35LA440 17S 6W 35</td>
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<td>35LA658 17S 6W 36</td>
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<td>35LA565 17S 5W 4</td>
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<td>35LA566 17S 5W 3</td>
<td>345'</td>
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<td>35LA568 17S 5W 4</td>
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<tr>
<td>35LA647 17S 4W 18/19</td>
<td>375'</td>
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<td>P/O</td>
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<td>6</td>
<td>475'</td>
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* Site Type: LS = Lithic Scatter
LGS = Lithic/Ground Stone Scatter

+ Vegetation Zones: P = Prairie
P/O = Prairie/Oak
P/A = Prairie/Ash
P/H = Prairie/Hemlock
O = Oak

vicinity (Cheatham 1984). The most recent project, begun in 1980 and continuing today, is the Noti-Veneta highway project being investigated for the Oregon Department of Transportation through the Oregon State Museum of Anthropology; three sites (35LA439, 440, 658) have been recorded and initially investigated to date on that project.

A project of great relevance to the present study area is an intensive survey of Fern Ridge Reservoir which was undertaken in 1981 by the U.S. Army Corps of Engineers. More than 100 sites were recorded during the project. The results of the project are still being analyzed, and a majority of the sites have not yet been entered into the state files. As a result, the Fern Ridge sites are not included in this study, but it is anticipated that their inclusion in the general site data base
will provide much needed information on the central area of the Long Tom Sub-basin.

PROJECT DESIGN

Before the initiation of this project, 45 sites had been recorded within the project area during the execution of a number of survey and excavation projects over the past twenty years. No systematic or large-scale surveys had been carried out in the area, and neither the potential nor the difficulties inherent in conducting a survey of the magnitude proposed was known at the time this project was initiated.

The greatest difficulty anticipated during this project was the countless number of landowners encompassed within the project boundaries. Although hundreds and even thousands of landowners were anticipated as part of the sampling universe, the project was not initially set up to handle a project area which turned out to contain 30,471 tax lots (refer to Table 2 for a summary of tax lots by section within the project area). Each tax lot generally has from one to three owners, although some lots have multiple owners (for example, 72 owners were counted for one lot and 80 owners for another). As a result, the number of landowners included within the project area undoubtedly exceeds 50,000 and may approach 100,000 although the exact number has not been calculated.

The ramifications of the large number of landowners and the corresponding decrease in the size of tax lots to be surveyed were increasingly felt as the project progressed. The major changes required by the number of tax lots involved included: (1) a switch from a transect survey design to a block area design, and (2) a drastic reduction in the sample area surveyed due to increased coordination requirements and other paperwork.
Table 2. Summary of tax lots by section within project area.

<table>
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<td>16S 5W</td>
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<tr>
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<tr>
<td>17S 4W</td>
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| 16S 4W 7   | 35           | 16S 5W 21  | 34           |
| 8          | 65           | 22         | 3            |
| 9          | 36           | 23         | 5            |
| 10         | 33           | 24         | 9            |
| 11         | 23           | 25         | 9            |
| 12         | 19           | 26         | 9            |
| 13         | 24           | 27         | 12           |
| 14         | 26           | 28         | 29           |
| 15         | 42           | 29         | 9            |
| 16         | 70           | 30         | 23           |
| 17         | 25           | 31         | 51           |
| 18         | 4            | 32         | 16           |
| 19         | 11           | 33         | 12           |
| 20         | 52           | 34         | 34           |
| 21         | 4            | 35         | 121          |
| 22         | 56           | 36         | 3            |
| 23         | 25           |            |              |
| 24         | 14           |            |              |
| 25         | 18           |            |              |
| 26         | 12           |            |              |
| 27         | 53           |            |              |
| 28         | 38           |            |              |
| 29         | 29           |            |              |
| 30         | 15           |            |              |
| 31         | 8            |            |              |
| 32         | 11           |            |              |
| 33         | 20           |            |              |
| 34         | 17           |            |              |
| 35         | 240          |            |              |
| 36         | 28           |            |              |
| 16S 5W 7   | 23           | 2           | 1163         |
| 8          | 24           | 3           | 775          |
| 9          | 17           | 4           | 113          |
| 10         | 92           | 5           | 33           |
| 11         | 12           | 6           | 1            |
| 12         | 16           | 7           | 33           |
| 13         | 12           | 8           | 27           |
| 14         | 18           | 9           | 78           |
| 15         | 15           | 10          | 550          |
| 16         | 43           | 11          | 1637         |
| 17         | 33           | 12          | 454          |
| 18         | 27           | 13          | 517          |
| 19         | 47           | 14          | 1494         |
| 20         | 19           | 15          | 442          |
Table 2 (continued)

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The research design proposed at the beginning of this project was to include coverage of the entire project area using transects which would crosscut the Long Tom Sub-basin at half-mile intervals and produce more representative coverage of the project area both in terms of environmental and vegetation zones. The transect survey was to result in an intensive coverage of approximately 12.5% of the project area. An underlying assumption of this methodology was that a systematic interval (transect) sample is simpler to carry out and also yields more accurate estimates of the values of the total population (Judge et al. 1975).

The project was initiated with the systematic transect design, but it quickly became obvious that the method would not work in a project area which is more urban/suburban than it is rural, and which consequently has a rather high density of tax lots and a corresponding high number of landowners, renters and leasees, all of whom must be consulted and cooperate before land can be surveyed. More than 700 letters requesting survey permission were sent to landowners (Appendix A), of which 281 (40%) were returned (Table 3). Such a high return rate is considered excellent for mailing surveys or requests and is taken as an indication of local interest in archaeology. Of the returned permission forms, 65.1% granted permission to survey, 29.2% denied permission, and 5.7% responded with information on recent changes in property ownership. As a result of both the non-responses and the negative responses, it was impossible to survey a transect greater than a mile in length within the project area. Because of problems of access (i.e., having to cross land where survey permission was denied in order to reach land where survey permission was granted), the transect approach was dropped early in the 1983 season in favor of a block area survey.

Under the block area survey, tax lots greater than 20 acres in extent were favored for survey as smaller lots were considered to
Table 3. Summary of survey results.

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<tr>
<td>Total acreage in revised project area</td>
<td>70,400</td>
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<tr>
<td>Total number of tax lots in project area</td>
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<td>Number of positive responses received</td>
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<td>Number of negative responses received</td>
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<td>Other responses</td>
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<td>Number of surveyed tax lots</td>
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<td>Number of surveyed acres</td>
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<td>Percent of total project area surveyed (168 mi²)</td>
<td>6%</td>
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<td>Percent of revised project area surveyed (110 mi²)</td>
<td>9%</td>
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require a much greater expense of travel time and paperwork than the acreage covered warranted. Block areas (tax lots) to be surveyed were chosen from the landowners who had responded positively to the survey request sent out under the transect design.

Under the revised survey design, sections under federal or municipal ownership (such as Mahlon Sweet Airport and Fern Ridge Reservoir) were excluded from the survey sample. In addition, all sections with more than 100 tax lots were also excluded under the assumption that the vast majority of the lots would be smaller than 20 acres and too difficult to survey under the present project. Eighteen sections were excluded as federally/municipally owned, and 40 sections were excluded as exceeding 100 tax lots (Figure 4). As a result, the 168-square-mile project area was reduced to 110 square miles for sampling purposes. A few larger tracts were selected for survey within the excluded sections where permission was received, but such exceptions were relatively rare.
Figure 4. Location of surveyed tracts (solid areas) and excluded sections (shaded sections) within the project area (USGS 15' quadrangle, 1967, and Eugene 15' quadrangle, 1946).
Figure 5. Location of all recorded sites within the Long project area.
hunting, short-term camping, lithic reduction, etc.).

The present project was not successful in locating sites which overtly appear to be villages, although several possibilities are included among the recorded sites. A determination of village function will have to await the testing of those sites. The present data indicate, however, that two main site types can be defined on the basis of the presence or absence of ground stone implements used in food preparation. These sites are distinguished here as lithic scatters (LS) and lithic/ground stone scatters (LGS) (Table 4).

It is posited that sites with ground stone are more likely to have been summer base camps or winter villages than lightly used task-specific sites. One of the shortcomings of making this distinction is that some sites may contain grinding tools but may have no evidence of such on the surface (such as the Flanagan site which excavations proved to have been a summer base camp). As a result, the number of lithic/ground stone sites will be underestimated on the basis of survey data.

An impression of prehistoric land use patterns can be gained by examination of the environmental settings with which the sites are associated. Information on the nature of the environment of the Willamette Valley at the time of historic contact is available in the original Government Land Office survey notes which date from 1853-1854. The natural vegetation of the project area at the time of historic contact has been reconstructed by Johannessen and others (1971). A plotting of the sites on the historic vegetation map provides a rough indication of the vegetation zones with which the sites were associated in late prehistoric times (Figure 6).

As indicated in Table 5, 62 of the recorded 105 sites are associated with the prairie flatlands on the floor of the Long Tom Sub-basin. More than 27% of these prairie sites are known to contain
Table 4. Summary of recorded archaeological sites.

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<th>Elevation</th>
<th>Site Type*</th>
<th>Vegetation Zone+</th>
<th>Extent (m)</th>
<th>Age**</th>
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<td>328'</td>
<td>LS</td>
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<td></td>
</tr>
<tr>
<td>35LA696</td>
<td>16S 5W 24</td>
<td>340'</td>
<td>LS</td>
<td>P</td>
<td>30 x 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA697</td>
<td>16S 5W 24</td>
<td>340'</td>
<td>LS</td>
<td>P</td>
<td>100 x 200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA698</td>
<td>16S 5W 25</td>
<td>340'</td>
<td>LS</td>
<td>P</td>
<td>30 x 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA699</td>
<td>16S 5W 25</td>
<td>347'</td>
<td>LS</td>
<td>P</td>
<td>20 x 20+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA700</td>
<td>16S 5W 25</td>
<td>348'</td>
<td>LS</td>
<td>P</td>
<td>70 x 30+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA701</td>
<td>16S 5W 25</td>
<td>348'</td>
<td>LS</td>
<td>P</td>
<td>20 x 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA702</td>
<td>16S 5W 25</td>
<td>348'</td>
<td>LS</td>
<td>P</td>
<td>40 x 20+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA703</td>
<td>16S 5W 25</td>
<td>348'</td>
<td>LGS</td>
<td>P</td>
<td>40 x 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA704</td>
<td>16S 5W 26</td>
<td>345'</td>
<td>LS</td>
<td>P</td>
<td>55 x 70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA705</td>
<td>16S 5W 26</td>
<td>355'</td>
<td>LS</td>
<td>P</td>
<td>200 x 200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA706</td>
<td>16S 5W 26</td>
<td>345'</td>
<td>LS</td>
<td>P</td>
<td>20 x 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA707</td>
<td>16S 5W 27</td>
<td>350'</td>
<td>LS</td>
<td>P/O</td>
<td>70 x 120</td>
<td>LA</td>
<td></td>
</tr>
<tr>
<td>35LA708</td>
<td>16S 5W 27</td>
<td>350'</td>
<td>LS</td>
<td>P/O</td>
<td>10 x 10</td>
<td>LA</td>
<td></td>
</tr>
<tr>
<td>35LA709</td>
<td>16S 5W 29</td>
<td>490'</td>
<td>LS</td>
<td>O</td>
<td>30 x 60</td>
<td>MA,EA?</td>
<td></td>
</tr>
<tr>
<td>35LA710</td>
<td>16S 5W 35</td>
<td>345'</td>
<td>LS</td>
<td>P</td>
<td>60 x 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA711</td>
<td>16S 5W 35</td>
<td>350'</td>
<td>LGS</td>
<td>P</td>
<td>60 x 160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA712</td>
<td>16S 5W 35</td>
<td>350'</td>
<td>LS</td>
<td>P</td>
<td>10 x 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA713</td>
<td>16S 5W 35</td>
<td>350'</td>
<td>LS</td>
<td>P</td>
<td>40 x 60</td>
<td>MA</td>
<td></td>
</tr>
<tr>
<td>35LA714</td>
<td>17S 5W 7</td>
<td>395'</td>
<td>LS</td>
<td>O</td>
<td>10 x 10+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA715</td>
<td>17S 5W 8</td>
<td>380'</td>
<td>LS</td>
<td>P/O</td>
<td>60 x 170</td>
<td>LA</td>
<td></td>
</tr>
<tr>
<td>35LA716</td>
<td>17S 5W 8</td>
<td>385'</td>
<td>LS</td>
<td>P/O</td>
<td>20 x 20+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA717</td>
<td>17S 5W 17</td>
<td>385'</td>
<td>LGS</td>
<td>P/Pn</td>
<td>10 x 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA718</td>
<td>17S 5W 18</td>
<td>390'</td>
<td>LS</td>
<td>P</td>
<td>20 x 20+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA719</td>
<td>17S 5W 19</td>
<td>390'</td>
<td>LS</td>
<td>P/F</td>
<td>10 x 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35LA720</td>
<td>17S 5W 19</td>
<td>390'</td>
<td>LGS</td>
<td>P/F</td>
<td>10 x 20</td>
<td>LA</td>
<td></td>
</tr>
<tr>
<td>35LA721</td>
<td>17S 6W 13</td>
<td>475'</td>
<td>LS</td>
<td>O</td>
<td>30 x 30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Site Type: LS = lithic scatter  LGS = lithic/ground stone scatter

+ Vegetation Zone: P = prairie  A = ash  F = fir
O = oak  M = maple  Pn = pine

** Age: LA = Late Archaic (0–2000 B.P.)  LMA = Late Middle Archaic (2000–4000 B.P.)
EMA = Early Middle Archaic (4000–6000 B.P.)
MA = Middle Archaic (2000–6000 B.P.)
EA = Early Archaic (6000–8000 B.P.)
Figure 6. Location of archaeological sites in relation to the contact vegetation zones of 1853-54 (reconstructed in Johannessen et al. 1971:293).
Table 5. Summary of archaeological sites by contact vegetation zone.

<table>
<thead>
<tr>
<th>Vegetation Zone</th>
<th>Site Type</th>
<th>lithic scatter</th>
<th>lithic/ground stone scatter</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Prairie</td>
<td></td>
<td>45</td>
<td>17</td>
<td>62</td>
<td>59%</td>
</tr>
<tr>
<td>Prairie-edge:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prairie/Oak</td>
<td></td>
<td>10</td>
<td>6</td>
<td>16</td>
<td>15%</td>
</tr>
<tr>
<td>Prairie/Ash</td>
<td></td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>10%</td>
</tr>
<tr>
<td>Prairie/Fir</td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Prairie/Hemlock</td>
<td></td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Prairie/Maple</td>
<td></td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Prairie/Pine</td>
<td></td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Oak</td>
<td></td>
<td>9</td>
<td>-</td>
<td>9</td>
<td>9%</td>
</tr>
<tr>
<td>Ash (by water courses)</td>
<td></td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>75</td>
<td>30</td>
<td>105</td>
<td></td>
</tr>
</tbody>
</table>

grinding implements. An additional 32 sites are located on the interface of the prairie and the trees which edge the sub-basin floor (primarily oak, pine, fir, hemlock and maple) and the Oregon white ash which closely follows the major watercourses on the floodplain. It is assumed that camps located on such an interface would provide more protection from the elements and easier access to resources from two different vegetational zones. More than 40% of these prairie-edge sites appear to be grinding sites and very probably summer base camps or even villages. In all, more than 90% of the sites recorded to date are associated with the prairie floodplain. A vast majority of these sites are situated near marshes, streams or the main stem of the Long Tom River. The remaining 11 sites are located not far from the prairie, with nine associated with oak groves and two with ash groves.
Table 6. Summary of collected projectile points (after Toepel 1985).

<table>
<thead>
<tr>
<th>Period</th>
<th>Projectile Point Series</th>
<th>Point Type</th>
<th>Collected Specimens</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATE ARCHAIC</td>
<td>Small Stemless</td>
<td>SS1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SS2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Narrow-necked</td>
<td>NN1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NN2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NN3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>LATE MIDDLE ARCHAIC</td>
<td>Moderate Broad-necked</td>
<td>MB2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MB3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>EARLY MIDDLE ARCHAIC</td>
<td>Heavy Broad-necked</td>
<td>HB1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HB2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Heavy Stemless</td>
<td>HS3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Summary Description of Artifacts

Only 22 diagnostic projectile points were collected during the survey (Figure 7; Table 6). The small number of points recovered is the result of several factors: (1) many landowners did not wish materials to be collected from their property; (2) many of the recorded sites were known by landowners or neighbors who routinely collected points from the sites (in these cases, the collections are often in the near water sources.
Figure 7. Projectile points from the Long Tom project area: a-d, Small Stemless series; e-o, Narrow-necked series; p-r, Moderate Broad-necked series; s-t, Heavy Broad-necked series; u-v, Heavy Stemless series (shown actual size).
landowners' possession and available for study); (3) some of the recorded sites had heavy ground cover and points were not easily spotted; and (4) extensive time was not spent by the surveyors in looking for projectile points while defining sites.

Of the points collected, 68% are small points which fall into the Small Stemless and Narrow-necked series defined at the Flanagan site (Toepel 1985). These small points are most indicative of the Late Archaic period spanning the last 2000 years. Only three of the points (14%) appear to date from Late Middle Archaic times (2000-4000 B.P.), and four specimens (18%) can be associated with the Early Middle Archaic (4000-6000 B.P.). The general paucity of older materials from the project area is not surprising in view of the nature of the floodplain environment, in which older evidence of occupation would tend to be obscured. Older sites undoubtedly exist on the floodplain, however, and remain to be discovered through excavation.

Observations on Obsidian Availability in the Long Tom Sub-basin

Another purpose of the survey was to obtain additional information on the availability and source of obsidian within the study area. Before 1981, it was believed that the prehistoric inhabitants of the Willamette Valley primarily obtained obsidian from Cascade sources, either directly from sources in the mountains themselves or from stream gravels which were washed into the tributaries of the Willamette River and would therefore be found on the east side of the valley. In 1981, however, the Corps of Engineers survey in Fern Ridge Reservoir resulted in the discovery of a bed of obsidian cobbles and pebbles eroding from the mouth of Inman Creek on the west side of the reservoir. Specimens from the Inman Creek, or Fern Ridge source as it has variously been called, match with obsidian pebbles found by Rick Minor at the mouth of the Siuslaw River (Skinner 1983). Since both the Siuslaw River and
Inman Creek head in approximately the same area in the Coast Range, it was considered likely that an in situ obsidian source existed in the Coast Range where none had been previously known.

One of the exercises embarked on during this survey was a search of the upper reaches of the Inman Creek area to see if such a source could be found. Although access to the creek was allowed in several areas by landowners, vegetation was very thick and no luck was encountered in locating an obsidian source. Further survey work on the floodplain resulted in observations of naturally occurring obsidian pebbles in many of the sections surveyed, ranging between the Coast Range and the main stem of the Willamette River. In addition, obsidian cobbles were found more than three miles upstream from Inman Creek on a terrace above the Long Tom River.

The observations gathered during this survey shed only a little light on the nature of the Inman Creek obsidian source. It appears that the obsidian did not come from an in situ source in the Coast Range. Instead, the gravels associated with the obsidian cobbles and pebbles indicate that it appears to have been washed into position through a flood or other event. The original source of this secondary obsidian deposit is not yet known, although it is probably Cascade in origin. The time of its deposition is also not known, but it is likely that it was in place when the Long Tom River was a tributary of the Siuslaw River (which would account for the occurrence of obsidian pebbles at the mouth of the Siuslaw). According to Baldwin and Howell (1949), the capture of the Long Tom River into its present northward course paralleling the Willamette River probably took place in late Tertiary times (more than 2-3 million years ago). The means by which the river's course was shifted probably involved downcutting of the minor barrier between the Long Tom and the Willamette through flooding. Baldwin and Howell observed:

It should be noted that Amazon Creek, as well as adjacent
minor tributaries, drain slightly away from the Willamette, and no doubt during extreme flood stages Willamette overflow is contributed to the Long Tom. Zimmerman [1927] stated that "It is easy to conceive that the Willamette River once ran west from Eugene, followed the channel of the present Amazon slough and flowed down the channel now occupied by the Long Tom River."

Relatively fresh gravels of undoubted Cascade origin are found east and north of Fern Ridge in the valley of Amazon creek and the Long Tom River... (Baldwin and Howell 1949:122; emphasis added).

It would appear, then, that the Inman Creek obsidian gravels are rather wide-spread, are probably Cascade in origin, and have been in place in the Long Tom Sub-basin for millions of years.

SUMMARY AND CONCLUSIONS

The objective of the Long Tom archaeological survey was to locate and record sites in a cross-section of floodplain and foothill environments in the 12 by 14 mile project area in the central portion of the Long Tom hydrologic sub-basin. It was expected that the results would provide a context within which excavated sites could be placed, as well as being of some use to land use planners involved in making decisions about future development of the area.

One of the most important aspects of this project was the methodology of surveying in an urban-agricultural environment. More than 30,000 tax lots and an estimated 50,000-100,000 landowners were included within the project area, making the proposed transect approach to the survey an impossibility. Although heavily populated environments such as the Long Tom project area make the mechanics of surveying exceedingly cumbersome, it is precisely those areas which are most critically in need of inventory projects such as this one. In addition, the response of landowners to the Long Tom survey indicates that
the public is in favor of such projects. In order to make "urban surveys" more manageable in the future, the following recommendations are offered:

1. Smaller project areas, such as a single township or even half a township, should be used. The present project area, which included nearly five townships, was unwieldy in the number of tax lots, landowners and paperwork involved.

2. If any questions arise before the initiation of a project concerning the number of tax lots or landowners involved within a particular area, the information can generally be obtained from county agencies which have recently become computerized. A check of this information can aid in the delineation of a project area or in determining the feasibility of a survey methodology. Unfortunately, this information was not available to this investigator at the beginning of the Long Tom project or the scope of the project would undoubtedly have been altered.

3. Survey work can be concentrated on the larger lots within a project area to maximize the cost/site ratio.

4. Smaller project areas are more conducive to more intensive coverage and to more personal contacts. The community approach (working through community centers or door-to-door survey) is more appropriate for the smaller survey areas and was not used for the Long Tom project.

In addition to the 45 previously recorded sites in the 168-mile project area, 60 additional sites were encountered. Approximately 30% of the sites within the project area have ground stone tools and are probably summer base camps or perhaps village sites. The remaining 70% are lithic scatters which include task-specific sites. Temporally
diagnostic projectile points indicate that much of the area was occupied during Late Archaic times (within the last 2000 years), although some indications of earlier occupation were collected. Although a specific functional site typology could not be formulated at this time with the present data base, the present project will contribute significantly to such an effort in the near future.
REFERENCES CITED

Baldwin, Ewart M. and Paul W. Howell

Balster, C.A. and R.B. Parsons
1968 Geomorphology and soils, Willamette Valley, Oregon. Oregon State University Agricultural Experiment Station Special Report 265.

Berreman, Joel

Cheatham, Richard D.

Collins, Lloyd R.

Cordell, Linda S.

Follansbee, Julia A.

Follansbee, Julia A. and Ellen Mays

Hodge, Frederick Webb
Johannessen, Carl L., W.A. Davenport, Artimus Millet, and S. McWilliams  
1971 The vegetation of the Willamette Valley. Annals of the  

Judge, W. James, James I. Ebert, and Robert K. Hitchcock  
1975 Sampling in regional archaeological survey. In Sampling in  
Archaeology, edited by James W, Mueller, pp. 82-123.  
University of Arizona Press, Tucson.

Miller, Floyd Eugene  
1975 The Benjamin sites (35LA41, 42). In Archaeological Studies  
in the Willamette Valley, Oregon, edited by C.M. Aikens.  

Minor, Rick  
1978 A survey for cultural resources in portions of the Fern  
Ridge Reservoir area, Lane County, Oregon. Report of the  
Department of Anthropology, University of Oregon, to the  
Oregon State Department of Fish and Wildlife.

Minor, Rick and Kathryn Anne Toepel  
1978 Archaeological overview. In Prehistory and history of BLM  
lands in west-central Oregon: a cultural resource over­  
view, by Stephen Dow Beckham, Rick Minor and Kathryn Anne  
Toepel. University of Oregon Anthropological Papers 25:  
117-183.

Oregon State Water Resources Board  
Board, Salem.

Piontkowski, Michael, David R. Brauner, and Wilbur A. Davis  
1974 Interim report, Willamette watersheds survey. Report of  
the Department of Anthropology, Oregon State University, to  
the National Park Service.

Skinner, Craig  
1983 Obsidian studies in Oregon. Unpublished M.A. Thesis,  
Department of Interdisciplinary Studies, University of  
Oregon.

Southard, Michael D.  
1970 Willamette Valley prehistory project, 1970 Southard survey,  
summary report. Manuscript on file, Oregon State Museum of  
Anthropology, University of Oregon.

Toepel, Kathryn Anne  
1985 The Flanagan site: 6,000 years of occupation in the Upper  
Willamette Valley, Oregon. Unpublished PhD Dissertation,  
Department of Anthropology, University of Oregon.
Toepel, Kathryn Anne and Stephen Dow Beckham

Toepel, Kathryn Anne and Rick Minor

White, John R.


Woodward, John A.

Zimmerman, Don Z.
APPENDIX A:

LANDOWNER AND SITE SURVEY FORMS
January 31, 1983

Richard & Doris Stallings
29710 Meadow View Dr.
Junction City, OR 97448

Dear Richard & Doris Stallings:

You are one of several hundred landowners who are being contacted in regard to a large-scale archaeological survey project being planned in an area west of Eugene where your property is located. The survey will be conducted this winter and spring by the Oregon State Museum of Anthropology with the help of student archaeologists enrolled at the University of Oregon. The objectives of the project and the proposed field methods are described in the enclosed information sheet.

Before we begin our project, we ask that you complete the enclosed permit form and return it in the self-addressed, stamped envelope provided. If you are no longer the owner of the property lot listed on the release form, please return the form with a note to that effect so that we may contact the present landowner. In addition, if you already know of an archaeological site in the vicinity of the project area, we would be very interested in recording it for our site files.

If you have any questions about the project, please contact me or one of the project assistants at 686-5139. We appreciate your assistance in this matter and look forward to your response.

Sincerely,

Kathryn A. Toepel
Project Director

3 enclosures
Description of the Project

The Oregon State Museum of Anthropology is sponsoring a survey for archaeological sites in the Long Tom River drainage west of Eugene during the winter of 1983. The project is supported in part by a grant from Oregon's State Historic Preservation Office, part of a federal program aimed at uncovering and appreciating our heritage both through history and archaeology.

The Long Tom River project is designed to learn more about the native Willamette Valley people—the Kalapuya—through a study of the distribution of different types of archaeological sites (such as winter villages, butchering sites, camps, etc.) on the valley floor and foothills. The present project is focused on the recording of archaeological sites in the area which will fit together to form a pattern of Kalapuya land use. This project will be the first large-scale archaeological survey to be conducted in the Willamette Valley.

Area to be Covered

The project will be conducted within a 14 by 12 mile area west of Eugene (see map on reverse). The project area extends from the Lane/Linn county line on the north to 2 miles south of Fern Ridge Reservoir, and from west Eugene on the east to 2 miles west of Elmira on the west.

What Will Happen

An archaeological survey is, strictly speaking, an inspection of the ground surface for evidence of aboriginal use in the form of tools and stone chips. It does not require digging or any other kind of disturbance to property.

For this project, the surveyors will be equipped with pencil and forms for recording sites, a compass, a map, and undoubtedly their raingear. If a site is encountered, the surveyors will take note of the size of the site, its location, types of tools, and density of the debris. This information will be used to determine the site's function and, if possible, its general age. No items will be collected by the surveyors without the landowner's consent. If collection is allowed, the landowner either may choose to donate the materials to the Oregon State Museum of Anthropology for future study or may request to have the materials returned at the end of the study.

Coverage of the 14 by 12 mile project area will be accomplished with survey teams of 2 people who will walk east-west across the river valley at ½-mile intervals while recording sites encountered. The two crew members will walk about 150 feet apart to increase the chance of finding larger sites. The survey team will cover the ground at a rate of 7-9 miles per day, depending on field conditions. Before the project is completed, the surveyors will have walked more than 600 miles.
At the present time, 42 archaeological sites are recorded in the project area. It is anticipated that at least 200-300 more sites will be found during the project.

Student Participation

The assistants and surveyors participating in this project are graduate and undergraduate students in archaeology at the University of Oregon. While assisting in the project, these students will receive class credit, as well as practical training in archaeological survey methods and proper site recording techniques.

People to Contact

If you have any questions or comments concerning this project, we would like to hear from you either by phone or by letter. Persons in charge of the survey include the following:

Kathryn A. Toepel, Project Director 686-5139 (office phone)
Sara Scott, Project Assistant 686-5139
Jim Cox, Project Assistant 686-5139
Dr. Don Dumond, Project Advisor 686-5102 (Anthropology Department)

Address correspondence to: Long Tom Survey
Oregon State Museum of Anthropology
University of Oregon
Eugene, OR 97403
PERMISSION FORM

Subject: Permission to conduct a surface survey of archaeological materials for the Long Tom River survey project

PLEASE CHECK ONE OF THE FOLLOWING FOR SURVEY PERMISSION:

/ / Permission is hereby granted to survey for archaeological sites on my property as described on the inclosed information sheet.

/ / Permission is not granted to survey my property for archaeological sites.

PLEASE CHECK ONE OF THE FOLLOWING FOR COLLECTION PERMISSION:

/ / Permission is hereby granted to conduct a limited collection of archaeological materials on my property if any are encountered during the survey; I wish the artifacts to be deposited at the Oregon State Museum of Anthropology in my name at the completion of the project where they will be available for future study and for museum display purposes.

/ / Permission is hereby granted to conduct a limited collection of archaeological materials on my property if any are encountered during the survey; all artifacts collected are to be returned to me at the completion of the project.

/ / Permission is not granted to collect on my property.

If you have any further comments or questions, please note them below:

(attach label with landowner name, address, and tax lot number)

_________________________  ______________________ |
Signature                                      Date

Phone:

Address correction (if needed):
LONG TOM ARCHAEOLOGICAL SURVEY SITE RECORD FORM

Oregon State Museum of Anthropology, University of Oregon

Temporary No.: ___
Permanent No.: ___
Lot No.: ___

County: ___
Legal Description: ___
USGS Map Reference: ___
Elevation: ___
Cultural Affiliation: ___
Contact Vegetation (GLOs): ___
UTM: ___

Soils/sediments: ___
Vegetation: ___
Topography (floorplain, terrace, valley): ___
Distance to water: ___
Water source: ___
Aspect (slope direction): ___
Slope: ___
Depth of deposit: ___
Surface visibility: ___

Date: ___
Recorder: ___
Section: ___
Section: ___
Site Type: open site
Site Extent: ___
Other: ___
Surface collection from site: ___

Owner: ___

Contact Vegetation (GLOs): ___
UTM: ___
Elevation: ___
Cultural Affiliation: ___
County: ___
Legal Description: ___
Temporary No.: ___

Oregon State Museum of Anthropology, University of Oregon

LONG TOM ARCHAEOLOGICAL SURVEY SITE RECORD FORM
Surface material/features observed (approximate number):

**Projectile points**
- narrow-necked ________
- broad-necked ________
- bipoint ________

**Other tools**
- Choppers ________
- Drills ________
- Misc. bifaces ________
- Chipped cobbles ________

**Ground stone**
- mano ________
- metate ________
- mortar ________
- pestle ________

**Fire-cracked rock (dispersed)** ________
**Possible oven concentration** ________
**Possible housepit depression** ________

**Debitage (approx. number)** ________
**Percentage of raw materials:**

**Surface density ________/m²**

**Artifacts collected:** ________ **Photograph numbers:** __________________________

**Returned to owner:** ________ / Deposited at OSMA: ________
APPENDIX B:

ARCHAEOLOGICAL SITE RECORD FORMS
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA662  County Lane  Cultural Area Upper Will. Valley
Type of Site lithic scatter
Property Location T16S, R4W, Section 7, NW^4 of NE^4, W.M.
Map reference: USGS Junction City 7.5' quad, 1967
Site Location on low rise on west edge of plowed field 100 m east of house and about 200 m west of slough marked by tree stand draining into Flat Creek;
elevation: 328'
Site Description light scatter of debitage and fire-cracked rock; maximum density: 5 items/m^2

Area of occupation 20 m E-W by 30 m N-S
Depth and character of fill silty clay of unknown depth
Vegetation cover plowed field
Present condition surficially disturbed by plowing
Material collected or observed approx. 30 flakes (70% chert, 30% obsidian), 2 basalt flakes, 3 split obsidian pebble cores, 4 chert cores, fire-cracked rock
Recommendations for future work none
Owner and address Ronald and Karla DeFoe
Attitude toward excavation
Present use agriculture

N. Photograph Nos.

Recorded by Kathryn Toepel

Date March 12, 1984

Scale 1 inch = 620 meters

(when square represents a section 1"=1/4 mi. | 402 m)
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA663  County  Lane  Cultural Area Upper Will. Valley
Type of Site  lithic scatter
Property location  T16S, R4W, Section 7, NE1 of NE1, W.M.
Map reference: USGS Junction City 7½' quad, 1967
Site Location  on higher ground midway between two sloughs near Flat Creek;
elevation: 330'

Site Description  small concentration of debitage and fire-cracked rock; maximum
density: 5 items/m²

Area of occupation  30 m in diameter
Depth and character of fill  silty clay of unknown depth
Vegetation cover  pasture
Present condition  probably disturbed by plowing
Material collected or observed 50 flakes (75% obsidian, 20% chert, 5% basalt), 1 chert
core, few fire-cracked rock fragments, 1 white chert biface fragment
Recommendations for future work  none
Owner and address  Ronald and Karla DeFoe  Attitude toward excavation
Present use  pasture/agriculture

Photograph Nos.  

Recorded by  Kathryn Toepel  Date  March 12, 1984

Scale  1 inch = 620 meters

(when square represents a section 1̊=26 mi. 1402 m)
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA664    County Lane    Cultural Area Upper Will Valley

Type of Site: lithic/ground stone scatter

Property Location: T16S, R4W, Section 7, NE^ of NE^, W.M.

Map reference: USGS Junction City 7^, quad, 1967

Site Location: on bench in bend on southwest side of channelized slough leading to Flat Creek; elevation: 330'

Site Description: scatter of debitage, FCR and tools; maximum density: 10 items/m^2

Area of occupation: 35 m in diameter

Depth and character of fill: silty clay of unknown depth

Vegetation cover: pasture

Present condition: surficially disturbed by plowing

Material collected or observed: approx. 100 flakes (40% chert & obsidian, 20% basalt); several chert cores, 1 obsidian scraper, basalt hammer, basalt cobble spall flake tool; cobble-chopper, crude obsidian biface, pestle tip, FCR

Recommendations for future work: test

Owner and address: Einar & Marilyn Skovbo

Attitude toward excavation: 

Present use: agriculture/pasture

Recorded by: Kathryn Toepel

Date: March 12, 1984

Scale: 1 inch = 0.620 meters

Photograph Nos.

Recorded by: Kathryn Toepel

Date: March 12, 1984

Scale: 1 inch = 0.620 meters

Photograph Nos.
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA665 County Lane Cultural Area Upper Will. Valley

Type of Site lithic scatter

Property Location T16S, R4W, Section 7, NE 1 of NE 1, W.M.

Map reference: USGS Junction City 7/2 quad, 1967

Site Location on east side of channelized slough of Flat Creek on slight rise

in channel bend; an old gravel bar is located to the east; elevation: 330'

Site Description very small scatter of flakes and fire-cracked rock; peripheral to

dense site immediately west of slough (35LA664)

Area of occupation 20 m N-S by 10 m E-W

Depth and character of fill silty clay of unknown depth

Vegetation cover open plowed field

Present condition surficially disturbed by plowing

Material collected or observed approx. 10 chert flakes, 1 large flat basalt anvil, 1

cobble chopper, fire-cracked rock fragments

Recommendations for future work none

Owner and address Einar & Marilyn Skovbo Attitude toward excavation

Present use agriculture/pasture

Photograph Nos.

Recorded by Kathryn Toepel

Scale 1 inch = 620 meters

Date March 12, 1984

(when square represents a section 1" = 1/2 mi. (402 m))
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

Site No. 35LA666  
County Lane  
Cultural Area Upper Willamette Valley

Type of Site: Lithic scatter

Property Location: T16S, R4W, Section 7, NE1 of NE1, W.M.

Map reference: USGS Junction City 7½ quad, 1967

Site Location: 100 m south of main slough and 25 m north of small drainage leading north; on slightly higher ground about 200 m WNW of house; elevation: 330'

Site Description: Very small scatter of flakes and fire-cracked rock  
Maximum density: 5 items/m²

Area of occupation: 15 m in diameter

Depth and character of fill: Pebby silty clay of unknown depth

Vegetation cover: Open plowed field

Present condition: Surficially disturbed by plowing

Material collected or observed: Approx. 25 chert and basalt flakes, 1 obsidian flake, few fire-cracked rock fragments, 1 small white crockery fragment

Recommendations for future work: None

Owner and address: Ronald and Karla DeFoe

Attitude toward excavation:  
Present use: Agriculture

Photograph Nos.

Recorded by Kathryn Toepel

Date: March 12, 1984

Scale 1 inch = 620 meters  
(when square represents a section 1/4 mi. (402 m))
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA667 County Lane Cultural Area Upper Willamette Valley

Type of Site lithic scatter

Property Location T16S, R4W, Section 7, NW 1/4 NE 1/4, W.M.

Map reference: USGS Junction City 7.5' quad, 1967

Site Location 10+ m east of paved road and 20+ m south of house in garden area on north side of small drainage; elevation: 327'

Site Description scatter of flakes, fire-cracked rock, fresh-water mussel fragments and historic debris; maximum density: 5 items/m²

Area of occupation 30 m E-W by 20 m N-S

Depth and character of fill pebbly silty clay of unknown depth

Vegetation cover garden and plowed field

Present condition surficially disturbed by plowing

Material collected or observed approx. 50 flakes (70% chert, 20% obsidian, 10% basalt), 1 obsidian biface fragment, split obsidian pebbles, few FCR, few mussel shell fragments (1 collected)

Recommendations for future work test

Owner and address Ronald and Karla DeFoe Attitude toward excavation

Present use Agriculture

Photograph Nos. .................................................................

Recorded by Kathryn Toepel

Date March 12, 1984

Scale 1 inch = 620 meters

(when square represents a section 1" = 1/4 mi. [402 m])
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

Site No. 35LA668  County Lane Cultural Area Upper Willamette Valley

Type of Site lithic scatter

Property Location T6S., R6W., Section 8, SE1/4 of NW1/4 and SW1/4 of NW1/4, W.M.

Map reference: USGS Junction City 71/2' quad., 1967

Site Location east of railroad tracks and first house on east side of deadend street on west bank of Flat Creek; site is on slight rise on floodplain flat immediately east of the Stromme house north of fenceline; elevation: 334'

Site Description scatter of flakes; maximum density: 1 items/4 m²

Area of occupation 60 m E-W by 70 m N-S

Depth and character of fill silty clay of unknown depth

Vegetation cover open, plowed field

Present condition surficially disturbed by plowing

Material collected or observed approx. 60 flakes (70% chert, 30% obsidian).

1 heat-treated chert core

Recommendations for future work test

Owner and address Gayle Stromme, Frank Knox  Attitude toward excavation

Present use agriculture

Scale 1 inch = 620 meters (when square represents a section 1/4 × 1/4 mi. [402 m])

Recorded by Sara Scott, Thyme Siegel  Date February 25, 1983
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA669 County Lane Cultural Area Upper Will. Valley

Type of Site lithic scatter

Property Location T16S, R4W, Section 8, SE1/4 of NE1/4, W.M.

Map reference: USGS Junction City 71/2 quad, 1967

Site Location east of railroad tracks and first house on east side of deadend street; on east side of Flat Creek; site is on slight rise on floodplain flat east of small drainage just north of property fenceline and south of oak grove; elevation: 333'

Site Description sparse scatter of flakes and cores; maximum density: 1 items/3 m²

Area of occupation 30 m E-W by 60 m N-S

Depth and character of fill silty clay of unknown depth

Vegetation cover open plowed field

Present condition surficially disturbed by plowing

Material collected or observed approx. 50 flakes (60% chert, 30% obsidian, 10% basalt), 2 chert cores, fire-cracked rock

Recommendations for future work none

Owner and address Gayle Stromme, Frank Knox Attitude toward excavation

Present use agriculture

Recorded by Sara Scott, Thyme Siegel
Date February 25, 1983
Site No. 35LA670  County Lane  Cultural Area Upper Will Valley
Type of Site  lithic scatter
Property Location  T16S, R4W, Section 9, NE¼ of NW¼, W.M.
Map reference: USGS Junction City 7¼' quad, 1967
Site Location  at a bend on both sides of an intermittent drainage/slough on a slight rise on the open floodplain; elevation: 333'
Site Description  thin scatter of flakes and tools; maximum density: 1 item/m²
area was used as camp by Indians in historic times according to Gerald Edwards
Area of occupation  40 m E-W by 75 m N-S
Depth and character of fill  silty clay of unknown depth
Vegetation cover  plowed field
Present condition  disturbed by plowing
Material collected or observed  approx. 50 flakes (50% chert, 20% obsidian, 30% basalt), 2 choppers, 1 basalt core, 3 chert cores, 1 bipolar obsidian core, 2 obsidian points (collected), fire-cracked rock fragments
Recommendations for future work  test
Owner and address Gerald & Marjorie Edwards  Attitude toward excavation
Present use  agriculture

Recorded by  Kathryn Toepel  Date  February 19, 1984

35LA670/0-1  35LA670/0-2
obsidian  obsidian
unstemmed  NW = 8.5 mm

Scale 1 inch = 620 meters

(when square represents a section 1"=½ mi. | 402 m|)
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA671 County Lane Cutural Area Upper Will. Valley

Type of Site lithic scatter

Property Location T16S, R4W, Section 9, NW of NW, W.M.

Map reference: USGS Junction City 7½' quad, 1967

Site Location on a slight rise on floodplain on west bank of intermittent drainage;
elevation: 332'

Site Description small scatter of flakes and fire-cracked rock; maximum density:
1 item/2 m²

Area of occupation 20 m in diameter

Depth and character of fill silty clay of unknown depth

Vegetation cover plowed field

Present condition disturbed by plowing

Material collected or observed approx. 10 flakes (60% chert, 40% obsidian),
1 chert point (collected), fire-cracked rock fragments

Recommendations for future work none

Owner and address Gerald & Marjorie Edwards Attitude toward excavation

Present use agriculture

Recorded by Kathryn Toepel

Date February 19, 1984
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA672  County Lane Culural Area Upper Will. Valley

Type of Site lithic/ground stone scatter

Property Location T16S, R4W, Section 9, NE¼ of NW¼ and Section 4, SE¼ of SW¼, W.M.

Map reference: USGS Junction City 7½' quad, 1967

Site Location on a slight rise on floodplain overlooking nearby intermittent drainage
to east 30 m west of oak tree marking NE property corner of Lot 700; appears to
extent over property line into Section 4; elevation: 333'

Site Description very light scatter of flakes, fire-cracked rock and ground stone
fragments; maximum density: less than 1 item/2 m²

Area of occupation 30 m E-W by 10+ m N-S

Depth and character of fill silty clay of unknown depth

Vegetation cover plowed field

Present condition disturbed by plowing

Material collected or observed approx. 10 chert flakes and 5 basalt flakes:
1 unfinished obsidian biface, 2 unidentified ground stone fragments, FCR fragments.

Recommendations for future work none

Owner and address Gerald & Marjorie Edwards Attitude toward excavation

Present use agriculture

Photograph Nos.

Recorded by Kathryn Toepel

Date February 19, 1984

Scale 1 inch = 620 meters

(when square represents a section 1" = 1/4 mi. [402 m])
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA673  County Lane Cultural Area Upper Will. Valley

Type of Site  lithic/ground stone scatter

Property Location  T16S, R4W, Section 9, SE1 of SW1 and SW1 of SE1, W.M.

Map reference: USGS Junction City 7½' quad, 1967

Site Location  north of Harper Road off River Road on both banks of slough but predominantly on east side on slightly raised flats of floodplain; elevation: 335'

Site Description  dense scatter of flakes, tools, and FCR; possible village site or heavily used seasonal base camp; maximum density: 10 items/m²; owner has large private collection of projectile points from his property

Area of occupation  80 m E-W by 300 m N-S

Depth and character of fill  silty clay of unknown depth

Vegetation cover  open plowed field surrounded by oak trees nearby

Present condition  surficially disturbed by plowing

Material collected or observed  100s of flakes (60% chert, 30% obsidian, 10% basalt); pestle fragments, FCR, 5 obsidian points, split obsidian pebbles; FCR concentrations may indicate cama roasting ovens; red-stained earth with FCR

Recommendations for future work  test

Owner and address  Tom Harper  Attitude toward excavation

Present use  agriculture

Photograph Nos.

<table>
<thead>
<tr>
<th>0-1</th>
<th>0-2</th>
<th>0-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW = 3.0 mm</td>
<td>NW = 3.4 mm</td>
<td></td>
</tr>
</tbody>
</table>

Scale 1 inch = 620 meters

Recorded by Sara Scott, Jane Robbins

Date  March 10, 1983
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA674  County Lane  Cultural Area Upper Will. Valley
Type of Site lithic/ground stone scatter
Property Location T16S, R4W, Section 9, NE\(^1\) of SW\(^1\), W.M.
Map reference: USGS Junction City 7\(^1\) quad, 1967
Site Location along north side of slough along gentle bend just east of junction
with another slough (upper reaches of Flat Creek); elevation: 335'
Site Description small scatter of flakes, tools, and fire-cracked rock

Area of occupation 30 m in diameter
Depth and character of fill silty clay of unknown depth
Vegetation cover open plowed field
Present condition surfically disturbed by plowing
Material collected or observed 50+ obsidian and chert flakes, FCR, 1 pestle fragment,
1 narrow-necked obsidian point
Recommendations for future work test
Owner and address Tom Harper  Attitude toward excavation
Present use agriculture

Photograph Nos.

35LA674/0-1
obsidian
NW = 3.0 mm

Recorded by Sara Scott, Jane Robbins
Date March 10, 1983

Scale 1 inch = 620 meters
(when square represents a section 1"=1/4 mi. (402 m))
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA675 County Lane Cultural Area Upper Willamette Valley

Type of Site: lithic scatter

Property Location: T16S, R4W, Section 9, NE<sup>1</sup> of SW<sup>1</sup> and NW<sup>1</sup> of SE<sup>1</sup> W.M.

Map reference: USGS Junction City 7½' quad, 1967

Site Location: along west bank of slough on both sides of property fence;

elevation: 335'

Site Description: heavy concentration of debitage and tools

Area of occupation: 100+ m E-W x 50+ m N-S

Depth and character of fill: silty, clay of unknown depth

Vegetation cover: open, plowed field

Present condition: disturbed by plowing

Material collected or observed: 20+ obsidian and chert flakes, FCR, 1 large basalt knife (collected), chert cores, split obsidian pebbles, retouched flakes

Recommendations for future work: test

Owner and address: Tom Harper

Present use: agriculture

Photograph Nos.

Scale 1 inch = 620 meters

Recorded by Sara Scott, Jane Robbins

Date: March 10, 1983
Site No. 35LA676  County Lane Cultural Area Upper Willamette Valley
Type of Site lithic scatter
Property Location T16S, R4W, Section 15, NE\(^2\) of NW\(^\frac{1}{4}\), W.M.
Map reference: USGS Junction City 7\(^{1/2}\) quad, 1967
Site Location at northeast corner of Baker property in plowed field on west bank of former Willamette River channel (present intermittent drainage) west of Marshall island; elevation: 345'
Site Description small thin scatter of flakes

<table>
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<tr>
<th>Area of occupation</th>
<th>20 m in diameter</th>
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</thead>
<tbody>
<tr>
<td>Depth and character of fill</td>
<td>silty clay of unknown depth</td>
</tr>
<tr>
<td>Vegetation cover</td>
<td>open, plowed field</td>
</tr>
<tr>
<td>Present condition</td>
<td>disturbed by plowing</td>
</tr>
<tr>
<td>Material collected or observed</td>
<td>10-15 chert and obsidian flakes</td>
</tr>
</tbody>
</table>

Recommendations for future work: none
Owner and address: Elma Baker
Present use: agriculture

Scale 1 inch = 620 meters
(when square represents a section 1" = 1/4 mi. 1402 m)

Recorded by Jim Cox, Pam Endzweig
Date: March 22, 1983
Site No. 35LA677  County Lane Cultural Area Upper Willamette Valley

Type of Site lithic scatter

Property Location T16S, R4W, Section 15, SW¼ of NW¼, W.M.

Map reference: USGS Junction City 7½' quad, 1967

Site Location on east side of River Road north of Baker house on west bank of small drainage leading to Flat Creek; site is peripheral to 35LA687 about 100 m to west; elevation: 340'

Site Description diffuse scatter of flakes

Area of occupation 30 m N-S by 20 m E-W

Depth and character of fill silty clay of unknown depth

Vegetation cover open plowed field

Present condition disturbed by plowing

Material collected or observed 20-30 chert and obsidian flakes widely scattered

Recommendations for future work none

Owner and address Elmg Baker

Present use agriculture

Photograph Nos.

Scale 1 inch = 620 meters (when square represents a section 1"=½ mi. (402 m))

Recorded by Jim Cox, Pam Endzweig

Date March 22, 1983
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA678  County Lane Cultural Area Upper Will Valley
Type of Site lithic/ground stone scatter and "Witness Tree"
Property Location T16S, R4W, Section 15, SW1/4 of NW1/4 W.M.
Map Reference: USGS Junction City 7' quad, 1967
Site Location beginning about 30 m southwest of River Road/S sourn Lane intersection, site is primarily on east bank of bend in swale leading to Flat Creek; site is north of "Witness Tree" which has limb tied in knot; elevation: 340'
Site Description scatter of flakes with 3 concentrations of fire-cracked rock and charcoal (came oven remains?)

Area of occupation 100 m E-W x 60 m N-S
Depth and character of fill silty clay of unknown depth
Vegetation cover open, plowed field
Present condition disturbed by plowing
Material collected or observed 200+ chert and obsidian flakes, FGR, charcoal; owner has collected ground stone and projectile points from this site
Recommendations for future work test
Owner and address Tom Harper Attitude toward excavation agriculture
Present use agriculture

Recorded by Jim Cox, Mark Swift
Date February 25, 1983

Scale 1 inch = 620 meters

(When square represents a section 1"=1/4 mi. [402 m])
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA679 County Lane Cultural Area Upper Willamette Valley

Type of Site: Lithic scatter

Property Location: T16S, R4W, Section 17, SW1/4 of NE1/4, W.M.

Map Reference: USGS Junction City 7½' quad, 1967

Site Location: Between Prairie Road and the Southern Pacific Railroad tracks in plowed field on east side of small rise 100+ m west of Flat Creek; elevation: 340'

Site Description: Extensive scatter ofdebitage and tools; maximum density: 1 item/2 m²

Area of occupation: 280 m N-S x 160 m E-W

Depth and character of fill: Silty clay of unknown depth

Vegetation cover: Open plowed field

Present condition: Disturbed by plowing

Material collected or observed: 100+ flakes (45% each chert and obsidian, 10% basalt), 2 point fragments (collected), 2 chert unifaces, split obsidian pebbles, FCR, cores

Recommendations for future work: Test

Owner and address: John & Derelle Barber

Attitude toward excavation: Recorded use: Agriculture

Scale: 1 inch = 620 meters (when square represents a section 100 x 100 ft, or 30 x 30 m)

Recorded by: Sara Scott, Pam Endzweig

Date: April 15, 1983

Photograph Nos:

35LA679/0-1 35LA679/0-2
NW = 2.4 mm NW = 11.5 mm
obsidian chert
Site No. 35LA680  County Lane  Cultural Area Upper Willamette Valley
Type of Site lithic scatter
Property Location T16S, R4W, Section 17, SE1/4 of NW1/4, W.M.
Map reference: USGS Junction City 7½' quad, 1967
Site Location west of Southern Pacific RR tracks and east of Hwy. 99 along a rise on the north side of an intermittent drainage. May be part of 35LA681 but difficult to tell due to historic disturbance. Elevation: 340'
Site Description extensive scatter of flakes; maximum density: 1 item/2 m²

Area of occupation 100 m E-W x 50 m N-S
Depth and character of fill silty clay of unknown depth
Vegetation cover open plowed field
Present condition disturbed by plowing
Material collected or observed 100+ flakes (50% obsidian, 35% chert, 15% basalt), split obsidian pebbles, FCR
Recommendations for future work test
Owner and address John & Derelle Barber
Present use agriculture

Photograph Nos. .................................................................

Scale 1 inch = 620 meters

Recorded by Sara Scott
Date April 20, 1983

(when square represents a section 1”=¼ mi. [402 m])
Site No. 35LA661  County Lane Cultural Area Upper Will. Valley
Type of Site: lithic scatter
Property Location: T16S, R4W, Section 17, NW\(^2\) of NW\(^2\), W.M.
Map reference: USGS Junction City 7\(\frac{1}{2}\)' quad, 1967
Site Location: approx. 200 m west of Hwy 99 on west side of drainage between two small ponds and south of grove of trees near north edge of section line;
elevation: 338'
Site Description: extensive scatter of flakes; maximum density: 1 item/m\(^2\)

Area of occupation: 100 m N-S x 60 m E-W
Depth and character of fill: silty clay of unknown depth
Vegetation cover: tall grasses in unplowed field
Present condition: disturbed by previous plowing
Material collected or observed: 50+ flakes (50% obsidian, 50% chert),
1 obsidian uniface FCR

Recommendations for future work: test
Owner and address: John & Dereile Barber  Attitude toward excavation
Present use: agriculture

Scale: 1 inch = 620 meters

Recorded by Sara Scott, Jill Chappel  Date April 20, 1983
Site No. 35LA682  County Lane  Cultural Area Upper Willamette Valley
Type of Site lithic scatter
Property Location T16S, R4W, Section 17, SE ½ of NW ¼, W.M.
Map reference: USGS Junction City 7½' quad, 1967
Site Location west of Hwy 99 on east side of drainage between two small ponds
  north of fence and dirt road and north of fishing pond which leads into Flat Creek; elevation: 338'
Site Description small scatter of flakes; maximum density: 1 item/2 m²
Area of occupation 20 m in diameter
Depth and character of fill silty clay of unknown depth
Vegetation cover grasses in unplowed field
Present condition disturbed by previous plowing
Material collected or observed 30 flakes (60% obsidian, 35% chert, 5% basalt)

Recommendations for future work none
Owner and address John & Derelle Barber  Attitude toward excavation
Present use agriculture

Recorded by Sara Scott, Jill Chappel
Date April 20, 1983

Scale 1 inch = 620 meters
(when square represents a section 1" = 1/4 mi. [402 m])
# Oregon Archaeological Survey

## University of Oregon, Museum of Natural History

**Site No.** 35LA683  
**County** Lane  
**Cultural Area** Upper Will. Valley

**Type of Site:** lithic scatter

**Property Location:** T16S, R4W, Section 17, NE^4^ of NE^4^, W.M.

**Map reference:** USGS Junction City 71^ quad, 1967

**Site Location:** southwest corner of Graville property about 20 m east of corner  
west bank of drainage leading to Flat Creek; several hundred meters east  
of Prairie Road; elevation: 336'

**Site Description:** scatter of flakes; maximum density: 1 item/2 m^2

<table>
<thead>
<tr>
<th>Area of occupation</th>
<th>30+ m in diameter</th>
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<tbody>
<tr>
<td>Depth and character of fill</td>
<td>silty clay of unknown depth</td>
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<tr>
<td>Vegetation cover</td>
<td>open plowed field</td>
</tr>
<tr>
<td>Present condition</td>
<td>disturbed by previous plowing</td>
</tr>
<tr>
<td>Material collected or observed</td>
<td>30+ flakes (60% obsidian, 35% chert, 5% basalt)</td>
</tr>
</tbody>
</table>

**Recommendations for future work:** additional documentation

**Owner and address:** Windsor Graville

**Present use:** agriculture

---

**Photograph Nos.**

---

**Recorded by:** Jim Cox, Mark Freemesser

**Date:** Apr 11, 12, 1983
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA684 County Lane Cultural Area Upper Willamette Valley
Type of Site lithic scatter
Property Location T16S., R5W., Section 9., NE^4. of SE^4. W.M.
Map reference: USGS Elmera.15' quad., 1957
Site Location on floodplain flat, north of channelized ditch and feeder creek to Bear Creek and west of Territorial Road, about 300 m. west of Long Tom River; elevation: 230 ft.
Site Description widely dispersed scatter of debitage and fire-cracked rock; maximum density: 1 item/5 m^2.

Area of occupation 200 m. E-W. by 130 m. N-S.
Depth and character of fill silty clay of unknown depth
Vegetation cover open. plowed field
Present condition surficially disturbed by plowing
Material collected or observed approx. 30 flakes (40% chert, 60% obsidian), 2 projectile points (collected)
Recommendations for future work none.
Owner and address Elmer & Pauline Gartrell
Present use agriculture

Photograph Nos. 35LA684/0-1 35LA684/0-2
obsidian chert
NW = 11.5 mm

Recorded by Sara Scott, M. Freemesser
Date March 22, 1983

Scale 1 inch = 1600 meters
(when square represents a section 1''=1/4 mi. (402 m))
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA685  County Lane
Type of Site lithic/ground stone scatter
Property Location T16S, RSW, Section 10, SE$rac{1}{4}$ of NW$rac{1}{4}$, W.M.
Map reference: USGS Elmira 15' quad, 1957
Site Location immediately north of Cheshire house which sits north of the store at
Cheshire on the west bank of the Long Tom River on a small rise; elevation: 330'

Site Description concentration of debitage, fire-cracked rock, and ground stone;
maximum density: 4 item/m$^2$

Area of occupation 60 m in diameter
Depth and character of fill silty clayey midden at least 1-1$rac{1}{2}$ m in depth
Vegetation cover open plowed field and garden; oak trees in near vicinity
Present condition surficially disturbed by plowing

Material collected or observed 100s of chert and obsidian flakes, 2 projectile points
(collected), 1 pestle (collected); owner has large collection from this site

Recommendations for future work excavation
Owner and address Neil Cheshire
Present use garden

Photograph Nos.

Mr. Cheshire is very knowledgable and cooperative and is open to being contacted if more information is needed

35LA685/0-1 35LA685/0-2
obsidian  obsidian
NW = 4.1 mm NW = 4.1 mm

Recorded by Jim Cox, Bob Bryson
Date February 26, 1983

Scale 1 inch = 1600 meters

(with square represents a section 1"=1/4 mi. [402 m])
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA686  County Lane Cultural Area Upper Willamette Valley

Type of Site: Lithic scatter

Property Location: T16S, R5W, Section 10, NW1/4 of NE1/4, W.M.
Map reference: USGS Elmira 15' quad, 1957

Site location: On floodplain flat northwest of Nelson's house on east side of irrigation ditch about 1 km north of the Siuslaw Highway (Hwy 36) and 500 m east of the Long Tom River; elevation: 330'

Site Description: Sparse scatter of debitage and fire-cracked rock; maximum density: 1 item/m²; neighbor Lingo has collected hundreds of small points from this area over the past many years.

Area of occupation: 30 m E-W by 60 m N-S

Depth and character of fill: Silty clay of unknown depth

Vegetation cover: Open plowed field

Present condition: Surfacially disturbed by plowing

Material collected or observed: Approx. 30+ flakes (50% chert, 50% obsidian)

Recommendations for future work: None

Owner and address: Robert & Marjorie Nelson

Present use: Agriculture

Photograph Nos.

Recorded by Sara Scott, M. Freemesser
Date: March 18, 1983

Scale: 1 inch = 1600 meters
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

Site No. 35LA687  County Lane  Cultural Area Upper Willamette Valley

Type of Site  Lithic scatter

Property Location  T16S, RSW, Section 10, SE1/4 of NE1/4, W.M.

Map reference: USGS Elmira 15' quad, 1957

Site Location  100-200 m NNE of Nelson's house about 1 km north of the Siuslaw Highway (Hwy 36) and 250 m west of a meander channel of the Long Tom River; elevation: 330'.

Site Description  Dispersed scatter of debitage and fire-cracked rock; maximum density: 1 item/2 m²; neighbor Lingo has collected several hundred small obsidian points from the site over many years (no mention of grinding tools).

Area of occupation  50 m E-W by 120 m N-S

Depth and character of fill  Silty clay of unknown depth

Vegetation cover  Open plowed field

Present condition  Surficially disturbed by plowing

Material collected or observed  Approx. 75+ flakes (70% chert, 30% obsidian)

Recommendations for future work  Test

Owner and address  Robert & Marjorie Nelson  Attitude toward excavation  

Present use  Agriculture

Recorded by  Sara Scott, M. Freemesser  Date  March 18, 1983

1 inch = 1600 meters

Recorded by  Sara Scott, M. Freemesser  Date  March 18, 1983
Site No. 35LA688  County Lane Cultural Area Upper Will. Valley
Type of Site lithic scatter
Property Location T16S, RSW, Section 13, SE 1/4 of NW 1/4, W.M.
Map reference: USGS Junction City 7 1/2' quad, 1967
Site Location approx. 1 km west of the Vogt house off Vogt Lane on a small
rise about 20 m south of a channelized drainage leading to Amazon Creek;
elevation: 332'
Site Description restricted scatter of charcoal and fire-cracked rock; Edward Vogt
(Norman Vogt's father) said that the area west of the east Amazon Cr. channel had
been a swale and had lots of camas on it at one time; he found "fire-rings" when he
plowed parts of this area (probably similar to the site recorded here)
Area of occupation 5 m in diameter
Depth and character of fill silty clay of unknown depth
Vegetation cover grassy field
Present condition disturbed by previous plowing
Material collected or observed abundant charcoal and fire-cracked rock
Recommendations for future work none
Owner and address Edward Vogt
Present use agriculture

Photograph Nos. 

Recorded by Jim Cox
Date March 11, 1983
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA689  County Lane Cultural Area Upper Will Valley

Type of Site Lithic scatter

Property Location T16S, R5W, Section 15, NE^4 of NE^4, W.M.

Map reference: USGS Elmira 1' quad, 1957

Site Location on a small rise at the edge of a terrace 30 m east of the Long Tom River at the north side of its junction with an intermittent drainage between two oak groves; elevation: 333'

Site Description small scatter of flakes and fire-cracked rock; maximum density: 2 item/m^2

Area of occupation 25 m in diameter

Depth and character of fill silty clay of unknown depth

Vegetation cover grassy pasture

Present condition surficially disturbed by plowing

Material collected or observed approx. 50+ flakes (40% chert, 30% obsidian, 30% basalt), 1 chert core, many FCR fragments

Recommendations for future work none

Owner and address Cecil & Vera Middleton Attitude toward excavation

Present use pasture

Photograph Nos.

Recorded by Kathryn Toepel

Date February 26, 1984
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA690 County Lane Culural Area Upper Willamette Valley

Type of Site lithic scatter

Property Location T16S, R5W, Section 15, SE1 of NE1, W.M.
Map reference: USGS Elmira 15' quad, 1957

Site Location adjacent to an intermittent drainage on the south side in the crook of an oak grove; elevation: 332'

Site Description small scatter of flakes and tools; maximum density: 4 flakes/m²

Area of occupation 10 m in diameter

Depth and character of fill silty clay of unknown depth

Vegetation cover grassy pasture

Present condition surficially disturbed by plowing

Material collected or observed approx. 15 flakes (65% chert, 30% obsidian, 5% basalt), 1 cobble hammer, 1 chopper

Recommendations for future work none

Owner and address Cecil & Vera Middleton
Attitude toward excavation

Present use pasture

Scale 1 inch = 1600 meters

(when square represents a section 1" = 1/4 mi. [402 m])

Photograph Nos. 

Recorded by Kathryn Toepel

Date February 26, 1984
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA691  County Lane  Cultural Area Upper Willamette Valley

Type of Site lithic scatter

Property Location T16S  R5W  Section 15  SE1/4 of NE1/4 W.M.

Map reference: USGS Elmlra 15’ quad, 1957

Site Location on west bank of intermittent drainage east of Long Tom River about 50 m south of bow in drainage and 50 m north of fence; elevation 332’

Site Description very small scatter of flakes; maximum density 1 flake/m²

Area of occupation 10 m in diameter

Depth and character of fill silty clay of unknown depth

Vegetation cover: grass pasture

Present condition: surficially disturbed by plowing

Material collected or observed approx. 8-10 flakes (60% chert, 40% obsidian)

Recommendations for future work: none

Owner and address: Cecil & Vera Middleton  Attitude toward excavation: 

Pasture

Scale 1 inch = 1600 meters

(when square represents a section 1”=15 mi. [402 m])

Photograph Nos. Recorded by Kathryn Toepel

Date February 26, 1984
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. ......... 35LA692 ..... County .......... Lane ..... Cultural Area ........ Upper Willamette Valley.
Type of Site .... lithic scatter
Property Location .......... T16S, R5W, Section 15, SE\(\frac{1}{4}\) of NE\(\frac{1}{4}\), W.M.
Map reference: USGS Elmera 15' quad, 1957
Site Location .......... approximately 100 m south of bend in slough or broad drainage on east bank and 30 m northeast of an oak grove; elevation: 333'
Site Description .......... small scatter of flakes; maximum density: 4 flakes/m²

Area of occupation .......... 40 m N-S by 15 m E-W
Depth and character of fill ........ silty clay of unknown depth
Vegetation cover .......... grassy pasture
Present condition .......... disturbed by plowing
Material collected or observed .......... approx. 50 flakes (50% chert, 40% obsidian, 10% basalt); no FCR noted
Recommendations for future work .......... none
Owner and address .......... Cecil & Vera Middleton
Attitude toward excavation
Present use .......... pasture

Recorded by Kathryn Toepel
Date .......... February 26, 1984

Scale .......... 1 inch = 1600 meters
(when square represents a section 1"=\(\frac{1}{4}\) mi, 402 m²)
Site No. 35LA693  County Lane Cultural Area Upper Willamette Valley
Type of Site Lithic scatter (mound)
Property Location T16S, R2W, Section 15, SW1/4 of SE1/4, W.M.
Map reference: USGS Elmira 15' quad, 1957
Site Location at north edge of oak and other trees... 20 m east of Long Tom River and north of section fence; elevation: 333'
Site Description obvious mound or rise about 1 m above rest of floodplain; numerous flakes, FCR, tools although surface was obscured by grass; maximum observed density: 4 flakes/m²
Area of occupation 25 m in diameter
Depth and character of fill silty clay; rodent activity indicates depth (½-1 m)
Vegetation cover grassy pasture
Present condition disturbed by plowing and rodent activity
Material collected or observed approx. 100 flakes (70% chert, 20% obsidian, 10% basalt); 2 chert cores, split obsidian pebbles, large basalt flake tools, FCR
Recommendations for future work test
Owner and address Cecil & Vera Middleton Attitude toward excavation Present use pasture

Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Recorded by Kathryn Toepel
Date February 26, 1984

Scale 1 inch = 1600 meters (when square represents a section 1"=¼ mi. [402 m])
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA694  County Lane  Cultural Area Upper Willamette Valley
Type of Site lithic scatter
Property Location T16S, RSW, Section 15, SW1/4 of NE1/4 W.M.
Map reference: USGS Elmira 15' quad, 1957
Site Location on a low rise between two drainages leading to Long Tom River;
elevation: 332'

Site Description small scatter of flakes and fire-cracked rock; maximum density:
4 flakes/m²

Area of occupation 20 m N-S by 15 m E-W
Depth and character of fill silty clay of unknown depth
Vegetation cover grassy pasture
Present condition disturbed by plowing
Material collected or observed approx. 20 flakes (70% chert, 25% obsidian, 5% basalt);
fire-cracked rock
Recommendations for future work none
Owner and address Cecil & Vera Middleton  Attitude toward excavation
Present use pasture

Recorded by Kathryn Toepel
Date February 26, 1984

Scale 1 inch = 1600 meters

Photograph Nos.
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA695  County  Lane  Cultural Area  Upper Will. Valley
Type of Site  lithic/ground stone scatter
Property Location  T16S, R5W, Section 15, NW\(^1\) of SE\(^{\frac{1}{4}}\), W.M.
Map reference: USGS Elmira 15' quad, 1957
Site location  on plowed floodplain flats on west bank of Long Tom River;
elevation: 333'
Site Description  sparse scatter of flakes and fire-cracked rock; maximum density: 1 flake/3 m\(^2\); private collections from site have yielded 100 or so small obsidian points, 2 stone bowls, 3 pestles
Area of occupation  30 m N-S by 40 m E-W
Depth and character of fill  silty clay of unknown depth
Vegetation cover  open plowed field
Present condition  disturbed by plowing and collecting activities
Material collected or observed  approx. 40 flakes (30% chert, 70% obsidian)

Recommendations for future work  test
Owner and address  Robert Siewert  Attitude toward excavation
Present use  pasture

Photograph Nos. .................................................

Scale 1 inch = 1600 meters

Recorded by  Sara Scott, Jane Robbins
Date  February 24, 1983
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

Site No. 35LA696  County Lane  Cultural Area Upper Will Valley

Type of Site lithic scatter

Property Location T16S, R5W, Section 24, SE1 of NE1, W.M.

Map reference: USGS Junction City 7½' quad, 1967

Site Location approx. 100 m west of Purkerson Road north of dirt road on slope above east branch of Amazon Creek which lies 200 m to east of site;
elevation: 340'

Site Description sparse scatter of obsidian and chert flakes; visibility hindered due to grass cover

Area of occupation 30+ m in diameter

Depth and character of fill silty clay of unknown depth

Vegetation cover grass field

Present condition disturbed by previous plowing

Material collected or observed 20+ obsidian and chert flakes; density of cultural material was obscured by grass cover

Recommendations for future work none

Owner and address Ellen Hunton  Attitude toward excavation agriculture

Present use

N.

Photograph Nos. 

Recorded by Jim Cox

Date March 5, 1983

Scale 1 inch = 620 meters (when square represents a section 1"=½ mi, 1402 m)
Site No. 35LA697  County Lane Cultural Area  Upper Will. Valley
Type of Site  lithic scatter
Property Location  T16S, RSW, Section 24, SW¼ of SE¼ and Section 25, NW¼ of NE¼ and NE¼ of NW¼, W.M.; Map reference: USGS Junction City 7½' quad, 1967
Site Location  in field behind Purkerson house along northern property (section) line, on east side of tree grove about 150-200 m east of Amazon Creek on floodplain flats; elevation: 340'
Site Description  extensive scatter of chert and obsidian flakes; maximum density: 1 item/2 m²
Area of occupation  200 m N-S x 100 m E-W
Depth and character of fill  silty clay of unknown depth
Vegetation cover  grass field
Present condition  disturbed by previous plowing
Material collected or observed  approx. 100 flakes (55% chert, 40% obsidian, 5% basalt), FCR, split obsidian pebbles, 1 chert biface, 2 obsidian bifaces, 1 used obs. flake
Recommendations for future work  test
Owner and address  Louis Darrel and Rose Purkerson  Attitude toward excavation
Present use  agriculture

Scale: 1 inch = 620 meters
(when square represents a section 1" = 1/4 mi. (402 m))

Photograph Nos. ..........................................................

Recorded by Sara Scott, M. Freemesser
Date  April 5, 1983
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA698  County Lane Cultural Area Upper Will Valley

Type of Site lithic scatter

Property Location T16S, R5W, Section 25, NE\(^2\) of NW\(^2\), W.M.

Map reference: USGS Junction City 7\(^2\)' quad, 1967

Site Location on a small rise at junction between Amazon Creek and a slough east of dirt road; elevation: 340'

Site Description small concentration of flakes and fire-cracked rock; maximum density: 1 item/m\(^2\)

Area of occupation 30 m in diameter

Depth and character of fill silty clay of unknown depth

Vegetation cover open plowed field

Present condition disturbed by plowing

Material collected or observed approx. 40 flakes (60% chert, 35% obsidian, 5% basalt), 2 split obsidian pebbles, 2 used chert flakes

Recommendations for future work test

Owner and address Fern Ridge Hunt Club Attitude toward excavation

Present use agriculture

Photograph Nos. 

N.

Scale 1 inch = 620 meters

Recorded by Sara Scott

Date April 5, 1983
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA699 County Lane Cultural Area Upper Will. Valley

Type of Site lithic scatter

Property Location T16S, R5W, Section 25, NE¼ of SW¼, W.M.

Map reference: USGS Junction City 7½' quad, 1967

Site Location approx. 250 m south of Meadow View Road along fence line south of gravel pits on open floodplain flats 200+ m west of Amazon Creek;

elevation: 347'

Site Description small scatter of obsidian and chert flakes; maximum density:

1 items/2 m²

Area of occupation 20+ m in diameter

Depth and character of fill silty clay of unknown depth

Vegetation cover open plowed field

Present condition disturbed by previous plowing

Material collected or observed 15-20 obsidian and chert flakes

Recommendations for future work none

Owner and address Harold Drew

Present use agriculture

N. Photograph Nos.

Recorded by Jim Cox, Mark Freemesser

Date March 24, 1983

Scale 1 inch = 620 meters

(when square represents a section 1"=1/4 mi. [402 m])
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

<table>
<thead>
<tr>
<th>Site No.</th>
<th>35LA700</th>
<th>County</th>
<th>Lane</th>
<th>Cultural Area</th>
<th>Upper Will Valley</th>
</tr>
</thead>
</table>

Type of Site: **lithic scatter**

Property Location: T16S, R5W, Section 25, SE\(^2\) of SW\(^2\), W.M.

Map reference: USGS Junction City 7\(\frac{1}{4}\) quad, 1967

Site Location: approx. 600 m south of Meadow View Road along fence line south of gravel pits on open floodplain flats between Amazon Creek and a channelized former slough; elevation: 348'

Site Description: moderate scatter of obsidian and chert flakes; no tools noted; site may extend farther to the east across the property line; maximum density: 1 item/m\(^2\)

Area of occupation: 70 m N-S x 30+ m E-W

Depth and character of fill: silty clay of unknown depth

Vegetation cover: grass field

Present condition: disturbed by plowing

Material collected or observed: 100+ flakes (50\% chert, 45\% obsidian, 5\% basalt)

Recommendations for future work: test

Owner and address: Harold Drew  
Attitude toward excavation: 

Present use: agriculture

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**Photograph Nos.**

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Recorded by: Jim Cox, Mark Freemesser

Date: March 24, 1983

Scale: 1 inch = 620 meters  
(when square represents a section 1"=\(\frac{1}{4}\) mi, 1022 m)

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Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA701  County Lane Cultural Area Upper Will. Valley
Type of Site Lithic scatter
Property Location T16S, R5W, Section 25, SW¼ of SW¼, W.M.
Map reference: USGS Junction City 7¼' quad, 1967
Site Location approx. 250 m east of SW corner of section on east bank of
channelized intermittent drainage leading to Amazon Creek just north of
section fence; elevation: 348'
Site Description small light scatter of obsidian and chert flakes; no tools noted;
visibility obscured by grass cover; maximum density: 1 item/2 m²
Area of occupation 25 m N-S x 20 m E-W
Depth and character of fill silty clay of unknown depth
Vegetation cover grass field
Present condition disturbed by plowing
Material collected or observed 20+ flakes (60% chert, 40% obsidian)

Recommendations for future work none
Owner and address Harold Drew Attitude toward excavation
Present use agriculture

Recorded by Jim Cox, Mark Freemesser

Date March 24, 1983

Photograph Nos. [Blank]

Scale 1 inch = 620 meters (when square represents a section 1" = 1/4 mi. [402 m])
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA702 County Lane Culural Area Upper Will. Valley
Type of Site lithic scatter
Property Location T16S, R5W, Section 25, SE1 of SW1, W.M.
Map reference: USGS Junction City 7½' quad, 1967
Site Location approx. 400 m east of SW corner of section on floodplain flats
150 m east of channelized intermittent drainage leading to Amazon Creek along
section fence between Sections 25 and 36; elevation: 348'
Site Description small light scatter of obsidian and chert flakes; no tools noted;
visibility obscured by grass cover; 1 item/4 m²

Area of occupation 20+ m N-S x 40 m E-W
Depth and character of fill silty clay of unknown depth
Vegetation cover grass field
Present condition disturbed by plowing
Material collected or observed 25 flakes (65% chert, 35% obsidian)

Recommendations for future work none
Owner and address Harold Drew Attitude toward excavation
Present use agriculture

Recorded by Jim Cox, Mark Freemesser
Date March 24, 1983

Scale 1 inch = 620 meters
(when square represents a section 1' = 1/2 mi. [402 m])
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA703 County Lane Cultural Area Upper Will Valley
Type of Site lithic/ground stone scatter
Property Location T16S, R5W, Section 25, SW 1/4 of SW 1/4, W.M.
Map reference: USGS Junction City 7 1/2' quad, 1967
Site Location at SW corner of section on floodplain flats south of trees
on west band of channelized slough leading to Amazon Creek; elevation: 348'
Site Description light scatter of obsidian and chert flakes and one grinding
stone fragment; visibility obscured by grass cover; site may be extension of
35LA713 in Section 35 to west; 1 item/4 m²
Area of occupation 40 m in diameter
Depth and character of fill silty clay of unknown depth
Vegetation cover grass field
Present condition disturbed by plowing
Material collected or observed 25+ flakes (60% chert, 40% obsidian); 1 grinding
stone fragment; 1 obsidian biface fragment (collected)
Recommendations for future work none
Owner and address Harold Drew Attitude toward excavation
Present use agriculture

Photograph Nos. 35LA703/0-1
obsidian

Recorded by Jim Cox, Mark Freemesser
Date March 24, 1983

Scale 1 inch = 620 meters
(when square represents a section 1 1/8 mi. (402 m))
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA704  County Lane  Cultural Area Upper Will. Valley

Type of Site  lithic scatter

Property Location  T16S, R5W, Section 26, NE1/4 of SE1/4, W.M.
Map reference: USGS Elmira 15' quad, 1957

Site Location  on floodplain terrace 15 m from the west bank of a stream feeding Amazon Creek; about 300-400 m NE of Drew house at end of Drew Lane; elevation: 345' 

Site Description  moderate scatter of flakes; no fire-cracked rock or charcoal noted; maximum density: 2 flakes/m2

Area of occupation  55 m N-S by 70 m E-W

Depth and character of fill  silty clay of unknown depth

Vegetation cover  planted wheat field

Present condition  disturbed by plowing

Material collected or observed  approx. 75 flakes (30% chert, 70% obsidian)

Recommendations for future work  none

Owner and address  Harold Drew  Attitude toward excavation

Present use  agriculture

Photograph Nos. .................................................. 

Recorded by  Jim Cox  Date  March 25, 1983
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA705  County Lane  Cultural Area  Upper Will Valley

Type of Site  lithic scatter

Property Location  T16S, R5W, Section 26, SW 1/4 of SE 1/4 and SE 1/4 of SW 1/4, W.M.

Map reference: USGS Elmira 15' quad., 1957

Site Location  on low rise NE of intersection of Drew Lane and Alvadore Road

between houses; elevation: 355'

Site Description  thin scatter of flakes; no fire-cracked rock or charcoal

noted; maximum density: 1 flake/m²

Area of occupation  200 m in diameter

Depth and character of fill  silty clay of unknown depth

Vegetation cover  open plowed field

Present condition  disturbed by plowing

Material collected or observed  approx., 100+ chert and obsidian flakes

Recommendations for future work  test

Owner and address  Harold Drew  Attitude toward excavation

Present use  agriculture

Recorded by  Jim Cox

Date  March 25, 1983

Photograph Nos.

Scale  1 inch = 1600 meters

(when square represents a section 1" = 1/4 mi. {402 m})
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA706 County Lane Cultural Area Upper Willamette Valley

Type of Site lithic scatter

Property Location T16S. R5W. Section 26. NE^ of SE^ W.M.

Map reference: USGS Elmira 15' quad, 1957

Site location 600 m east of intersection of Alvadore Road with Meadow View Road. Adjacent to Meadow View Road and west of creek feeding into Amazon Creek on a small rise; elevation: 345'

Site Description small scatter of flakes; maximum density: 1 flake/m^2

Area of occupation 20 m in diameter

Depth and character of fill silty clay of unknown depth

Vegetation cover planted wheat field

Present condition disturbed by plowing

Material collected or observed approx. 25+ chert and obsidian flakes

Recommendations for future work none

Owner and address Harold Drew. Attitude toward excavation

Present use agriculture

Scale 1 inch = 1600 meters

Recorded by Jim Cox Date March 25, 1983

Photograph Nos. 

(when square represents a section 1"=1/4 mi. 1402 m^2)
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA707 County Lane Culural Area Upper Will. Valley
Type of Site lithic scatter
Property Location T16S, R5W, Section 27, SW1 of SE1, W.M.
Map reference: USGS Elmira 15' quad, 1957
Site Location on floodplain flat in plowed field immediately north of section fence on east side of channelized ditch; elevation: 350'

Site Description sparse scatter of flakes and tools; maximum density: 1 flake/3 m³ naturally occurring obsidian pebbles also observed

Area of occupation 120 m N-S by 70 m E-W
Depth and character of fill silty clay of unknown depth
Vegetation cover open plowed field
Present condition disturbed by plowing
Material collected or observed approx. 70+ flakes (25% chert, 70% obsidian, 5% basalt); 1 point tip, 1 small point (collected), split obsidian pebbles, 1 obsidian biface, 1 chert knife fragment (collected)

Recommendations for future work test
Owner and address Grover Kelsey, Attitude toward excavation
Present use agriculture

Photograph Nos.

35LA707/0-1 obsidian 35LA707/0-2 chert
NW = 6.0 mm

Recorded by Sara Scott, Pam Endzweig
Date April 1, 1983

Scale 1 inch = 1600 meters

(when square represents a section 1"=1/2 mi. (402 m))
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA708  County Lane  Cultural Area Upper Will. Valley

Type of Site  
lithic scatter

Property Location  T16S, RSW, Section 27, NW1/4 of SE1, W.M.

Map reference:  USGS Elmiria 15' quad, 1957

Site Location  along north property fence about 200 m east of west fence by

drainage ditch and approx. 500 m north of 35LA707; elevation: 350'

Site Description  small scatter of flakes; maximum density: 1 flake/m²

Area of occupation  10 m in diameter

Depth and character of fill  silty clay of unknown depth

Vegetation cover  open pasture

Present condition  disturbed by plowing

Material collected or observed  approx. 10 basalt flakes; one obsidian point (collected)

Recommendations for future work  none

Owner and address  Grover Kelsey

Attitude toward excavation  

Present use  pasture

Photograph Nos.

35LA708/0-1

obsidian

NW = 3.1 mm

Recorded by  Sara Scott, Pam Endzweig

Date  April 1, 1983

1 inch = 1600 meters

(when square represents a section 1" = 1/4 mi. (002 m))
Site No. 35LA709  County Lane Cultral Area Upper Will. Valley
Type of Site lithic scatter
Property Location T16S, R5W, Section 29, SE1 of SW1, W.M.
Map reference: USGS Elmira 15' quad, 1957
Site Location site lies in plowed field on south bank of small creek (Squaw Creek) and pond on east side of Thayer house, which is on north side of County Road 257; elevation: 490'
Site Description thin scatter of flakes and tools; maximum observed density: 1 flake/5 m²
Area of occupation 30 m N-S by 60 m E-W
Depth and character of fill silty clay of unknown depth
Vegetation cover open plowed field
Present condition disturbed by plowing
Material collected or observed less than 25 flakes (80% obsidian, 15% basalt, 5% chert); Thayer's daughter collected large projectile points from this area over the years
Recommendations for future work test
Owner and address Calvin & Betty Thayer Attitude toward excavation
Present use agriculture

Recorded by Sara Scott/M. Freemesser
Date April 5, 1983

Scale 1 inch = 1600 meters
(when square represents a section 1' = 1/4 mi. 1/25 mile)
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA710  County Lane Cultural Area Upper Willamette Valley
Type of Site Lithic scatter
Property Location T16S, R5W, Section 35, NW ¼ of NW ¼, W.M.
Map reference: USGS Elmira 15' quad, 1957
Site Location Site lies on floodplain flat due west of Sandborn house at end of Sandborn Lane in plowed field on east side of cottonwood grove and dirt road, south of section fence; elevation: 345'
Site Description Concentration of cracked obsidian pebbles and one large obsidian cobble core in association with secondary flakes; maximum density: 1 flake/2 m²
Area of occupation 120 m N-S by 60 m E-W
Depth and character of fill Silty clay of unknown depth
Vegetation cover Open plowed field
Present condition Disturbed by plowing
Material collected or observed 20-30 split obsidian pebbles and numerous cortex flakes; one large obsidian cobble core (collected), 1 agate flake
Recommendations for future work None
Owner and address Curtis & Helen Sandborn
Attitude toward excavation
Present use Agriculture

Photograph Nos.
Recorded by Sara Scott/M. Freemesser
Date March 31, 1983

Scale 1 inch = 1600 meters (when square represents a section 1"=½ mi. (402 m))
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

<table>
<thead>
<tr>
<th>Site No.</th>
<th>35LA711</th>
<th>County</th>
<th>Lane</th>
<th>Cultural Area</th>
<th>Upper Will. Valley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Site</td>
<td>Lithic/ground stone scatter</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Property Location</td>
<td>T16S, R5W, Section 35, SW1/4 of NE1/4, W.M.</td>
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<tr>
<td>Map Reference</td>
<td>USGS Elmira 15' quad, 1957</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Site Location</td>
<td>Site lies on floodplain flat on slight rise east 30 m east of small drainage leading to Amazon Creek; elevation: 350'</td>
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<tr>
<td>Site Description</td>
<td>Broad scatter of cracked obsidian pebbles and flakes; maximum density: 1 flake/2 m²; private collections from this site include small obsidian projectile points, stone bowl fragments and pestles</td>
<td></td>
<td></td>
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<tr>
<td>Area of Occupation</td>
<td>160 m N-S by 60 m E-W</td>
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<tr>
<td>Depth and Character of Fill</td>
<td>Silty clay of unknown depth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetation Cover</td>
<td>Grass field; visibility obscured in areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Present Condition</td>
<td>Disturbed by plowing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material Collected or Observed</td>
<td>20 split obsidian pebbles, 60 flakes (50% obsidian, 49% chert, 1% basalt), natural obsidian pebbles, 2 chert nodules</td>
<td></td>
<td></td>
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<tr>
<td>Recommendations for Future Work</td>
<td>Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner and Address</td>
<td>Keith &amp; B.A. March</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Present Use</td>
<td>Agriculture, grazing</td>
<td></td>
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</tr>
</tbody>
</table>

Recorded by Sara Scott/Pam Endzweig
Date: April 15, 1983

Photograph Nos.

Scale: 1 inch = 1600 meters (when square represents a section 1"=1/4 mi. (402 m))
Site No. 35LA712  County Lane Cultural Area Upper Will. Valley
Type of Site lithic scatter
Property Location T16S, R5W, Section 35, NE ½ of SW ¼, W.M.
Map reference: USGS Elmira 15' quad, 1957
Site Location site lies on west bank of small former slough leading to Amazon Creek and east of county road; elevation: 350'
Site Description small scatter of obsidian flakes; maximum density: 1 flake/m²
Area of occupation 10 m in diameter
Depth and character of fill silty clay of unknown depth
Vegetation cover grass field; visibility obscured in areas
Present condition disturbed by plowing
Material collected or observed approx. 10 flakes (60% obsidian, 40% chert), 1 split obsidian pebble
Recommendations for future work none
Owner and address Keith & B.A. March Attitude toward excavation
Present use agriculture, grazing

Photograph Nos.

Recorded by Sara Scott
Date April 14, 1983

Scale 1 inch = 1600 meters (when square represents a section 1"= 1/4 mi. (402 m²)}
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA713  County Lane  Cultural Area Upper Will. Valley

Type of Site lithic scatter

Property Location T16S, R5W, Section 35, NE1/4 of NE1/4, W.M.

Map reference: USGS Elmira 15' quad, 1957

Site Location site lies on west bank of small slough leading to Amazon Creek and east of Drew house and pond; site is on a small rise on floodplain flats; elevation: 350'

Site Description sparse scatter of flakes; maximum density: 1 flake/4 m²

Area of occupation 60 m N-S by 40 m E-W

Depth and character of fill silty clay of unknown depth

Vegetation cover grass field

Present condition disturbed by plowing

Material collected or observed approx. 25 flakes (60% obsidian, 40% chert), 1 pink chert projectile point (collected)

Recommendations for future work test

Owner and address Harold Drew  Attitude toward excavation

Present use agriculture

35LA713/0-1

chert

NW = 10.3 mm

Recorded by Sara Scott/M. Freemesser

Date March 22, 1983

Scale 1 inch = 1600 meters

(when square represents a section 1/6 mi. x 1/6 mi.)
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA714  County Lane  Cultural Area Upper Will. Valley
Type of Site lithic scatter
Property Location T17S, R5W, Section 7, NW\(\frac{1}{4}\) of NE\(\frac{1}{4}\), W.M.

Map reference: USGS Elmira 15' quad, 1957

Site Location on edge of foothills in densely wooded area (pine and oak); site is exposed in cow path on north side of fenceline east of powerline and due south of house on hill at end of driveway off Lawrence Road; elevation: 395'.

Site Description sparse scatter of flakes; maximum density: 1 flake/2 m²; flakes were visible in 10 m area of cow path; thick vegetation obscured remainder of site area

Area of occupation 10+ m in diameter

Depth and character of fill silt of unknown depth

Vegetation cover thick brush, oak (10%), pine (90%)

Present condition disturbed by cattle

Material collected or observed approx. 10 flakes (60% obsidian, 40% chert)

Recommendations for future work test

Owner and address Lane County Escrow Service

Present use cow path, woods

Photograph Nos. ..................................

Recorded by Sara Scott, Jill Chappel
Date May 12, 1983

Scale 1 inch = 1600 meters

(when square represents a section 1"=\(\frac{1}{2}\) mi. (402 m))
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA715 County Lane Cultural Area Upper Will. Valley

Type of Site... lithic scatter
Property Location... T17S, R5W, Section 8, SE 1/4 of NW 1/4, W.M.

Map reference: USGS Elmira 15' quad, 1957

Site Location... on bench of peninsula above Fern Ridge Lake east of Inman Cemetery at former mouth of Inman Creek on flat area above lake; trees lie between site area and the reservoir; elevation: 380'

Site Description... sparse scatter of flakes barely visible in thick grass in eroded areas; maximum density: 1 flake/4 m²

Area of occupation... 60 m N-S by 170 m E-W

Depth and character of fill... silty clay of unknown depth

Vegetation cover... heavy grasses, poor visibility

Present condition... good

Material collected or observed... approx. 20 flakes (70% obsidian, 25% chert, 5% basalt); 1 point tip, 1 small unstemmed obsidian point base (collected)

Recommendations for future work... test

Owner and address... Ben & Thelma Inman

Attitude toward excavation... stock grazing

Scale... 1 inch = 1600 meters

(when square represents a section 1'/¼ mi. (402 m))

Photograph Nos.

35LA715/0-1
obsidian

Recorded by... Sara Scott, Jill Chappe-
April 21, 1983
**Site No.** 35LA716  
**County**  
**Cultural Area** Upper Will. Valley  
**Type of Site** Lithic scatter  
**Property Location** T17S, R5W, Section 8, NE1/4 of SW1/4, W.M.  
**Map reference:** USGS Elmira 15' quad, 1957  
**Site Location** on southeast corner of property north of fence on small point above Fern Ridge Lake; elevation: 385'  
**Site Description** small scatter of flakes; may be more extensive but visibility was poor due to heavy grass cover  
**Area of occupation** 20+ m in diameter  
**Depth and character of fill** silty clay of unknown depth  
**Vegetation cover** heavy grasses, poor visibility  
**Present condition** perhaps disturbed by plowing  
**Material collected or observed** approx. 10 flakes (80% obsidian, 20% chert); 2 split obsidian pebbles  
**Recommendations for future work** none  
**Owner and address** Ben & Thelma Iman  
**Attitude toward excavation**  
**Present use** stock grazing  

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**Site Map**

![Site Map](image)

**Scale** 1 inch = 1600 meters

(when square represents a section 1"=1/4 mi. (402 m))

**Recorded by** Sara Scott, Jill Chappel  
**Date** April 21, 1983
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

<table>
<thead>
<tr>
<th>Site No.</th>
<th>35LA717</th>
<th>County</th>
<th>Lane</th>
<th>Cultural Area</th>
<th>Upper Will. Valley</th>
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</thead>
<tbody>
<tr>
<td>Type of Site</td>
<td>lithic/ground stone scatter</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Property Site Description</td>
<td>small scatter of flakes; owner previously collected a pestle and a grooved scoria abrader from the site; may be more extensive but visibility was poor due to heavy grass cover; maximum density: 1 flake/3 m²</td>
<td></td>
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</tr>
<tr>
<td>Site Location</td>
<td>site is immediately adjacent to Fern Ridge Lake on flat area above the lake south and east of the Surcamp house; elevation: 385'</td>
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</tr>
<tr>
<td>Site Description</td>
<td>small scatter of flakes; owner previously collected a pestle and a grooved scoria abrader from the site; may be more extensive but visibility was poor due to heavy grass cover; maximum density: 1 flake/3 m²</td>
<td></td>
<td></td>
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<tr>
<td>Area of occupation</td>
<td>10 m N-S by 20 m E-W</td>
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</tr>
<tr>
<td>Depth and character of fill</td>
<td>silty clay of unknown depth</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Vegetation cover</td>
<td>heavy grasses, poor visibility</td>
<td></td>
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<td></td>
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<tr>
<td>Present condition</td>
<td>perhaps disturbed by plowing</td>
<td></td>
<td></td>
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<tr>
<td>Material collected or observed</td>
<td>approx. 10 flakes (90% obsidian, 10% chert);</td>
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<td>Recommendations for future work</td>
<td>none</td>
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<tr>
<td>Owner and address</td>
<td>Early &amp; Veree Surcamp</td>
<td></td>
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<tr>
<td>Present use</td>
<td>stock grazing</td>
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</table>

Map reference: USGS Elmira 15' quad, 1957

Recorded by: Sara Scott, Jill Chappel
Date: April 5, 1983

Scale: 1 inch = 1600 meters

(when square represents a section 1" = 1/4 mi. (402 m))
Oregon Archaeological Survey
University of Oregon, Museum of Natural History

Site No. 35LA718
County Lane Cultural Area Upper Will. Valley
Type of Site lithic scatter
Property Location T17S, R5W, Section 18, NW[4 of SE[4], W.M.
Map reference: USGS Elmira 15' quad, 1957
Site Location on a small rise immediately east of Territorial Road and about 30 m south of driveway leading to Harrang mobile home about 300 m west of Fern Ridge Lake; elevation: 390'
Site Description small scatter of flakes visible in plowed strip on west edge of grass field; visibility badly obscured by grasses; maximum density: 1 flake/m²
Area of occupation 20+ m in diameter
Depth and character of fill silty clay of unknown depth
Vegetation cover planted grass field
Present condition disturbed by plowing
Material collected or observed approx. 12+ flakes (65% chert, 10% obsidian, 15% basalt)
Recommendations for future work none
Owner and address James Harrang
Attitude toward excavation agriculture
Present use agriculture

Photograph Nos.

Recorded by Jim Cox
Date May 19, 1984

Scale 1 inch = 1600 meters
(when square represents a section 1''=1/4 mi. [402 m])
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

Site No. 35LA719  
County  
Type of Site  
lithic scatter  
Property Location  
T17S, R5W, Section 19, NW1/4 of NW1/4, W.M.  
Map reference: USGS Elmira 15' quad, 1957

Site Location  
flakes are exposed along dirt access road behind the Spencer house  
west of Territorial Road; creek lies 150-200 m to northeast; elevation: 390'

Site Description  
small scatter of obsidian flakes and split pebbles; owners have  
collected about 20 narrow-necked points of obsidian and chert from the property;  
maximum density: 1 flake/m²

Area of occupation  
10 m N-S by 20 m E-W along roadway

Depth and character of fill  
silty clay of unknown depth

Vegetation cover  
brush, poison oak, fir, oak trees

Present condition  
disturbed by road but much of site probably intact

Material collected or observed  
approx. 10 obsidian flakes and several split obsidian pebbles

Recommendations for future work  
test

Owner and address  
Richard & Adelaide Spencer

Present use  
woods

Scale  
1 inch = 1600 meters

Photograph Nos.  
9

Recorded by  
Sara Scott, Judy Willig

Date  
May 25, 1983
Oregon Archaeological Survey  
University of Oregon, Museum of Natural History

Site No. 35LA720  County Lane Cultural Area Upper Will. Valley

Type of Site lithic/ground stone scatter

Property Location T17S, R5W, Section 19, NW¼ of NW¼, W.M.

Map reference: USGS Elmira 15' quad, 1957

Site location flakes are exposed in garden area by the Spencer house near the west bank of an intermittent drainage leading southeast to the Long Tom River (Fern Ridge Lake: 390' 

Site Description small scatter of obsidian flakes; owners have previously collected narrow-necked points and a pestle from the site area (recovered from a post hole); maximum density: 1 flake/m²

Area of occupation 10 m N-S by 20 m E-W along roadway

Depth and character of fill silty clay of unknown depth

Vegetation cover brush, poison oak, fir, oak trees

Present condition disturbed by road but much of site probably intact

Material collected or observed 20+ obsidian flakes; points and pestle are in landowner's possession

Recommendations for future work test

Owner and address Richard & Adelaide Spencer  Attitude toward excavation

Present use garden

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N. Photograph Nos. ..........................................

Scale 1 inch = 1600 meters

(when square represents a section 1"=½ mi. [402 m])

Recorded by Sara Scott, Judy Willig

Date May 25, 1983
<table>
<thead>
<tr>
<th>Site No.</th>
<th>35LA721</th>
<th>County</th>
<th>Lane</th>
<th>Cultural Area</th>
<th>Upper Willamette Valley</th>
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</thead>
<tbody>
<tr>
<td>Type of Site</td>
<td>Lithic scatter (spring site)</td>
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<td></td>
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<tr>
<td>Property Location</td>
<td>T17S., R6W., Section 13, NW1/4 of SE1/4, W.M.</td>
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<tr>
<td>Map reference</td>
<td>USGS Elmira 15' quad., 1957</td>
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<tr>
<td>Site Location</td>
<td>Around margins of spring site situated on the edge of the forested foothills west of Demming Road near unnamed drainage leading to Fern Ridge Lake; elevation: 475'</td>
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<tr>
<td>Site Description</td>
<td>Very sparse scatter of debitage in spring vicinity; maximum density: 1 item/4 m²</td>
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<tr>
<td>Area of occupation</td>
<td>30 m in diameter</td>
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<tr>
<td>Depth and character of fill</td>
<td>Soft silt of unknown depth</td>
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<tr>
<td>Vegetation cover</td>
<td>Grassy pasture</td>
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<tr>
<td>Present condition</td>
<td>Spring has been dredged and improved; used as watering hole</td>
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<tr>
<td>Material collected or observed</td>
<td>Noted fewer than 10 chert and obsidian flakes in spring vicinity</td>
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<tr>
<td>Recommendations for future work</td>
<td>None</td>
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<tr>
<td>Owner and address</td>
<td>Mr. Reese, 89656 Demming Rd, Maywood, Oregon</td>
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<tr>
<td>Present use</td>
<td>Pasture, small farm, Elmira</td>
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</tbody>
</table>

Long-time resident (Mrs. Allison) has obsidian tools, cores and flakes collected from spring vicinity over the years; the large size of the obsidian is probably due to the proximity to the Inman Creek/Fern Ridge source; according to Mrs. Allison, the open pasture in this area was formerly timber; there is another spring to the NW and one more 1/2 mile S.

Recorded by Kathryn Toepel, Jim Cox
Date: May 24, 1984