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Takelma Prehistory: Perspectives from Archaeology in the Elk Creek Dam Project in Southwest Oregon

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Between 1965 and 1989, archaeological investigations in connection with the Elk Creek Dam Project, some 60 km. north of the California border in Jackson County, Oregon, documented a record of Native American occupation and activity that began at least by 4,000–5,000 years ago and continued until shortly before contact between the Takelma people and Euro-Americans in the mid-nineteenth century. The dam project was cancelled in 1988, and a final synthesis of the investigations was never prepared. This article highlights some of the important contributions made by the substantial archaeological research conducted for the Elk Creek Dam Project. The ancestors of the Takelma appear to have had a close relationship with prehistoric peoples to the east and south over the last several thousand years, with the evidence pointing to the existence of an interaction sphere connecting the Northern Takelma with native groups in northern California in late prehistoric times.

The Takelma Indians, whose language is classified as an isolate in the Penutian phylum, are among the more poorly documented native peoples in southwest Oregon. Takelman, the name of the language spoken by the Takelma, is distantly related to other Penutian languages spoken in Oregon and California, and on this basis the presence of the Takelma in southwest Oregon is thought to have considerable time depth (Thompson and Kinkade 1990:45). Occupying interior portions of the drainages of the Umpqua and Rogue rivers, the Takelma and their Athapaskan and Shasta neighbors were decimated during the Rogue River Indian War. After hostilities ended in 1856, the Takelma were among a number of native peoples moved to the Grand Ronde and Siletz reservations in northwest Oregon. As a result of depopulation and dislocation early in the historic period, relatively little information about the Takelma was recorded by ethnographers (Kendall 1990).

In contrast to the limited ethnographic information available, a substantial amount of data about the prehistoric ancestors of the Takelma was recovered between 1965 and 1989 during multiple archaeological survey, testing, and data recovery projects sponsored by the U.S. Army Corps of Engineers (COE) in connection with the construction of a dam and lake on Elk Creek, located in the foothills of the southern Cascades, approximately 30 km. northeast of Medford in Jackson County, Oregon. Constituting the longest series of archaeological investigations focused on one area ever undertaken in western Oregon, archaeologists from six different organizations were employed over the course of the project: the University of Oregon (Cole 1965, 1966); Oregon State University (Brauner and Honey 1979; Brauner and Lebow 1983; Davis 1968, 1983); Intermountain Research (Budy and Elston 1986; Budy et al. 1986); INFOTEC Research (Pettigrew and Lebow 1987); and Mountain Anthropological Research (Nilsson and Kelly 1991).

Elk Creek is a perennial tributary at river mile 152 of the Rogue River, a major hydrologic system that drains much of southwest Oregon (Fig. 1). After delays for several years by legal actions, primarily in regard to its impacts on Coho salmon, Chinook salmon, and native steelhead, construction of the dam was stopped in 1988 at 25 m., one-third its design height. In 2009, the COE modified the dam by notching the structure and placing features in the stream and stream bank to restore passive

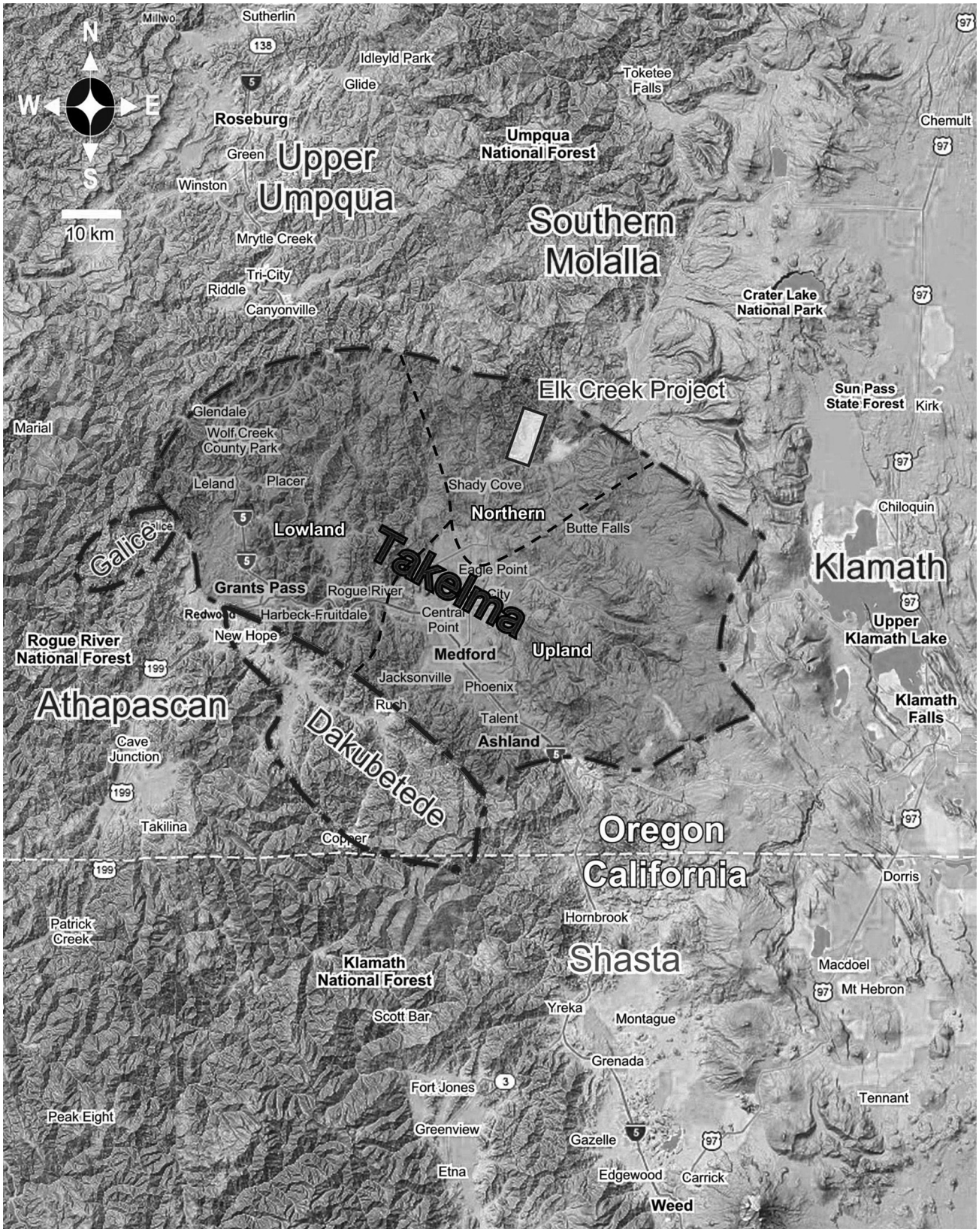

Figure 1. Location of the Elk Creek Project on the northern periphery of Takelma territory in southwest Oregon (after Gray 1987:20, Fig. 4).

passage for anadromous fish. The COE continues to own and manage the lands that were acquired in anticipation of the creation of Elk Creek Lake.

An unfortunate consequence of the way in which the Elk Creek Project was cancelled is that a synthesis of the archaeological investigations was never written. The investigations conducted for the project represented the state-of-the-art in archaeological fieldwork, analysis, and reporting. These investigations were based on thoughtfully developed research designs that required the collection of a wide range of archaeological data. Carried out in a region where relatively little archaeological research had been previously conducted, the investigations for the Elk Creek Project made significant contributions to our knowledge of the prehistory of southwest Oregon and adjacent northern California.

THE NORTHERN TAKELMA

The reports on archaeological investigations in connection with the Elk Creek Project attribute occupation and/or use of the Elk Creek drainage to two native peoples, the Takelma and the Southern Molala. This inference is based on the fact that the Elk Creek drainage is transitional in elevation between the territory of the Takelma, who occupied the bottomlands of the Rogue River Valley, and that of the Southern Molala, who lived in the higher elevations of the Cascade Range (see Fig. 1).

In 1987, near the end of the archaeological investigations for the Elk Creek Project, a new synthesis of ethnographic information on the Takelma by Dennis Gray became available. Incorporating information contained in the unpublished fieldnotes of John P. Harrington, Melville Jacobs, and Pliny Earl Goddard, this study established that the lower Elk Creek drainage, in which the Elk Creek Project is situated, was within the ethnographic territory of a previously unidentified dialect group of the Takelma, referred to as the "Northern Takelma" (Gray 1987:24–25). Gray places the boundary between the Northern Takelma and Southern Molala a few kilometers upstream from the Elk Creek Project (Gray 1987:20, Fig. 4). References to the Southern Molala living at lower elevations in the Cascade Range (Gatschet 1890:xxxvi; Spier 1927:360) probably reflect movements into areas previously within Takelma territory that followed the decline in the Takelma population in the historic period.

Gray places Northern Takelma lands "in the mountainous terrain of the upper reaches of the Rogue River drainage above Little Butte Creek," including the Trail Creek and Elk Creek tributaries of the upper Rogue River (Gray 1987:24). This area is peripheral to the core of Takelma territory, where the principal known villages were located, which was centered on the main stem of the upper Rogue River. Two major divisions of the Takelma were generally recognized: (1) the Lowland Takelma, whose nuclear territory extended from Gold Hill downstream in the Rogue River Valley to Grave Creek; and (2) the Upland Takelma (or Latgawa), whose nuclear territory extended upstream from Gold Hill and included much of the Bear Creek, Little Butte Creek, and Big Butte Creek drainages (Kendall 1990:590).

The lands assigned by Gray to the Northern Takelma were formerly included in Upland Takelma territory. Philip Drucker, one of the few anthropologists to record ethnographic information about the Takelma, noted that consultant Molly Orton, an Upland Takelma, stated that her people were "mountain people" who "derived most of their sustenance by hunting and gathering. Fishing was of less importance" (Drucker 1937:294). This characterization is probably also applicable to the Northern Takelma, who—living mainly on tributaries of the Rogue River in the foothills of the southern Cascades—were at the farthest end of anadromous fish migration routes and had less access to salmon than other Takelman groups.

Edward Sapir, who recorded notes on Takelma culture while studying their language in 1906, remarked that "many things point to the Takelma as having really formed an integral part of the distinct Californian area..." (Sapir 1907:251). Subsequently, although they were not mentioned by name, the Takelma were apparently included with native groups in the "Rogue and upper and middle Umpqua drainages in Oregon" in the Lower Klamath subarea of the larger Northwest Coast culture area defined by A. L. Kroeber (1939:30). Assignment of the Takelma to this cultural area, which extends along the Pacific coast from southeast Alaska to northern California, has been followed in the most recent treatment of the Takelma in the *Handbook of North American Indians* (Kendall 1990).

The location of Takelma territory in the interior Rogue River Valley, a considerable distance inland from the Pacific coast, makes their assignment to the Northwest Coast culture area problematic. In documenting the time depth and nature of prehistoric occupation in an area within their ethnographic territory, the archaeological investigations in the Elk Creek Project provide an important perspective on the cultural position and broader culture area relations of the Takelma people of southwest Oregon.

SUMMARY OF ELK CREEK PROJECT INVESTIGATIONS

The 3,600-acre Elk Creek Project is in the lower portion of the Elk Creek drainage. The former dam site is located on Elk Creek, approximately 2.7 km. above its confluence with the Rogue River. From the dam site, the Project extends approximately 12.8 km. upstream along Elk Creek to its northern boundary just below the confluence of Flat Creek with Elk Creek. This section of Elk Creek is characterized by a roughly north-south trending valley bounded by moderate to steep slopes. With elevations ranging from 460 m. to 600 m. above mean sea level, the Elk Creek Project contains three primary vegetation zones: (1) the Riparian Zone along the banks of Elk Creek and its tributaries; (2) the Oak Complex Zone at lower elevations; and (3) the Mixed Conifer Zone at higher elevations (Nilsson and Kelly 1991:10–11).

Altogether, 33 Native American archaeological sites were identified in the Elk Creek project area (Fig. 2). All but one of these sites were subjected to some level of archaeological testing. With the exception of that one site (35JA226), recorded during the last investigations in 1989, every recorded site in the Elk Creek Project was evaluated for its potential eligibility to the National Register. Currently, 20 sites are assessed as National Register eligible, and 12 are assessed as not eligible (Table 1).

The 33 Native American archaeological sites in the Elk Creek Project represent different types of settlements. The terms used to refer to these different site types varied somewhat over the course of the investigations. In a wide-ranging study of prehistoric settlement patterns in southwest Oregon, Winthrop (1993) attempted to standardize the terminology, defining three site types commonly recognized by archaeologists in the region—the village, the seasonal camp, and the task site.

Winthrop applied statistical measures to various aspects of the artifact assemblages recovered (e.g., density of stone artifacts per cubic meter, proportions of various stone artifact classes, and cobble and ground-stone density data compared with feature data) to re-classify previously investigated archaeological sites in the region (Winthrop 1993:88). Seventeen of the 33 sites in the Elk Creek Project were included in this study (Winthrop 1993:114–116). Sufficient data were not available from the other 16 Native American archaeological sites recorded in the Elk Creek Project for them to be included in Winthrop's study. Although lacking the rigorous application of statistical methods, a review of the information available indicates that 12 of these sites can be classified with considerable confidence into two of the three general site types recognized in Winthrop's study. Specifically, two sites can be classified as seasonal camps, based on the presence of numerous features (35JA26) and/or artifact frequency and diversity (35JA108), and 10 can be classified as task sites based on relatively ephemeral evidence of occupation. Four sites remain unclassified due to the paucity of archaeological evidence actually present at these localities (see Table 1).

In addition to the three basic site types, four sites in the Elk Creek Project were classified by Winthrop (1993) as combinations of two types. In addition to two sites where housepits were documented that are recognized as villages, two more sites were classified as a village or seasonal camp because of the reported former presence of housepits before their destruction by relic collectors. Four sites were classified as seasonal camps, and two more as a seasonal camp or task site. Nineteen sites are classified as task sites, and (as previously noted) four sites are unclassified.

CULTURAL CHRONOLOGY

The archaeological investigations conducted during the Elk Creek Project through 1986 formed the primary basis for the development by Pettigrew and Lebow of a prehistoric cultural sequence for the Rogue River and adjacent Middle Coquille River drainages (Pettigrew and Lebow 1987:11.59–11.62). This sequence was based on artifact typology and seriation, stratigraphic associations,

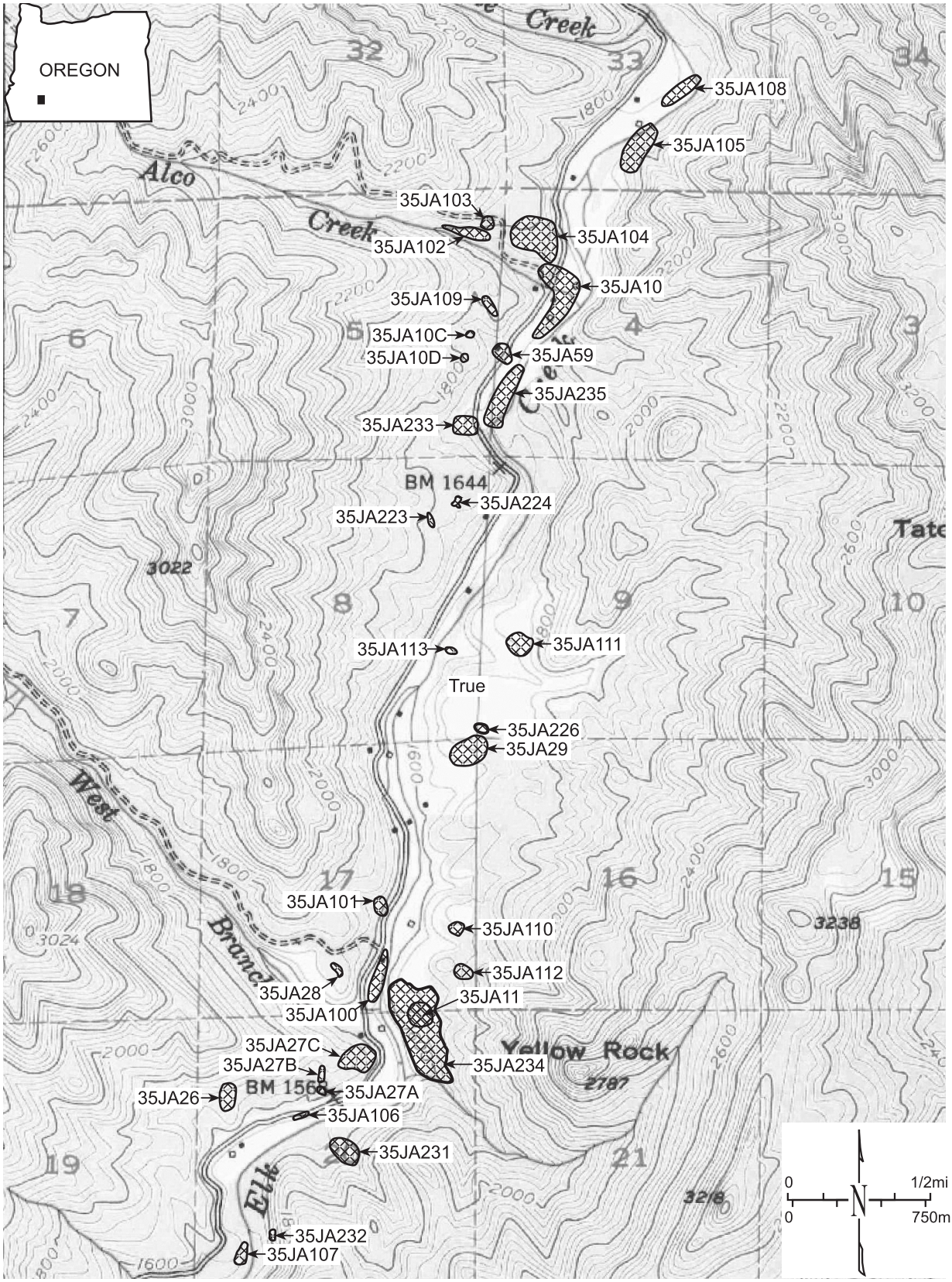

Figure 2. Locations of recorded archaeological sites in the Elk Creek Project.

Table 1

SUMMARY OF NATIVE AMERICAN ARCHAEOLOGICAL SITES RECORDED IN THE ELK CREEK PROJECT

Site Number	Investigations	NRHP Eligible	Site Type
35JA10	Testing	Yes	Seasonal Camp or Task Site[a]
35JA10C	Testing	No	Task Site[b]
35JA10D	Testing	No	Task Site[b]
35JA11	Testing	Yes	Task Site[a]
35JA26	Testing	Yes	Seasonal Camp[b]
35JA27A	Testing, Data Recovery	Yes	Village or Seasonal Camp (late); Seasonal Camp or Task Site (early)[a]
35JA27B	Testing, Data Recovery	Yes	Seasonal Camp or Task Site[a]
35JA27C	Testing	No	Task Site[b]
35JA28	Testing	Yes	Task Site[b]
35JA29	Testing	No	Task Site[b]
35JA59	Testing, Data Recovery	Yes	Village[a]
35JA100	Testing, Data Recovery	Yes	Village[a]
35JA101	Testing	Yes	Village or Seasonal Camp[a]
35JA102	Testing, Data Recovery	Yes	Task Site[a]
35JA103	Testing	Yes	Task Site[a]
35JA104	Testing	Yes	Task Site[b]
35JA105	Testing	No	Task Site[a]
35JA106	Testing	No	Unknown[c]
35JA107	Testing, Data Recovery	Yes	Seasonal Camp[a]
35JA108	Testing	Yes	Seasonal Camp[b]
35JA109	Testing	Yes	Task Site[b]
35JA110	Testing	No	Task Site[a]
35JA111	Testing	No	Task Site[b]
35JA112	Testing	Yes	Task Site[a]
35JA113	Testing	No	Unknown[c]
35JA223	Testing	No	Task Site[b]
35JA224	Testing	Yes	Seasonal Camp[a]
35JA226	Site Record Only	Not Evaluated	Unknown[c]
35JA231	Testing	No	Unknown[c]
35JA232	Testing	No	Task Site[b]
35JA233	Testing	Yes	Task Site[a]
35JA234	Testing	Yes	Task Site[a]
35JA235	Testing	Yes	Task Site[a]

[a]Classification from Winthrop (1993)
[b]Classification following criteria from Winthrop (1993)
[c]Insufficient data for classification

radiocarbon dates, and obsidian hydration measurements. The sequence recognized two broad stages: Paleo-Indian, estimated to date from 10,000 to 8,500 B.C., and Archaic, estimated to date from 8,500 B.C. to post-contact. The long stretch of time represented by Archaic stage cultures was divided into four cultural phases, five subphases, and one ceramic period (Table 2).

Projectile Point Typology

Although radiocarbon dates from key sites in the Rogue River and Middle Fork Coquille River drainages were incorporated where available, due to the limited time depth of all but a few dates, the phases and subphases defined by Pettigrew and Lebow were characterized primarily in terms of projectile point assemblages (Pettigrew and

Table 2

CULTURE SEQUENCE FOR THE ROGUE AND MIDDLE FORK COQUILLE RIVER DRAINAGE AREAS[a]

Stage/Phase	Estimated Period	Characteristics
ROGUE PHASE	250 B.C. to Post-contact	Strong presence of narrow-necked projectile points. Very low proportions of end scrapers. Lower consumption of obsidian.
Rogue 3 subphase	Post-contact	Euroamerican trade goods.
Rogue 2 subphase	A.D. 350 to Contact	Point type RRB and associated types overwhelmingly dominant.
Rogue 2 Ceramic period	A.D. 900 to 1300 or 1500	Ceramic vessels and figurines made and used. Takes place within Rogue 2 subphase.
Rogue 1 subphase	250 B.C. to A.D. 350	Strong presence of point type CSN. Regular occurrence of point types ECSB and WLS. Point type CSB persists in reduced numbers.
COQUILLE PHASE	2,500 to 250 B.C.	Appearance and dominance of point type CSB. Point type WLM becomes significant part of foliate series. Dramatic decline in obsidian consumption.
MARIAL PHASE	6,500 to 2,500 B.C.	Dominated by point types DSB and WLL. McKee unifaces relatively frequent. Heavy obsidian consumption. End scrapers very numerous.
Marial 2 subphase	3,500 to 2,500 B.C.	Point type WLL as numerous as WLXL. Point type SNSB regularly present. Edge-faceted cobbles decline in frequency.
Marial 1 subphase	6,500 to 3,500 B.C.	Point type WLXL dominant over WLL. Edge-faceted cobbles frequent.
APPLEGATE PHASE (begins **ARCHAIC STAGE**)	8,500 to 6,500 B.C.	Square-based lanceolate point forms, ranging from pentagonal to broad-stemmed concave-based. Neck widths 12–19 mm. Some foliate points present. Relatively light obsidian consumption. Edge-faceted cobbles frequent. End scrapers rare.
PALEO-INDIAN STAGE	10,000 to 8,500 B.C.	Fluted points.

[a]Table adapted from Pettigrew and Lebow (1987:11.60). Refer to Figure 3 for a key to the point type abbreviations.

Lebow 1987:8.16–8.39). A projectile point typology that included 16 defined types represented among the points found during the 1986 field season in the Elk Creek Project (Fig. 3) was developed as a means of constructing "a chronological framework for culture change in southwest Oregon" (Pettigrew and Lebow 1987:11.59). Nine Elk Creek sites were included in a "visually seriated order" of projectile point assemblages from sites in the Rogue River and Coquille River drainages (Pettigrew and Lebow 1987:Table 10.6). This seriation formed the basis for assignment of components/sites to cultural phases (Pettigrew and Lebow 1987:Table 10.7).

To update the projectile point data available, the frequencies of the various point types recovered from the last season of investigations in 1989, as well as some points not included in Pettigrew and Lebow's analysis (mainly due to low sample size), were compiled (Minor 2011:31–32, Table 4). This compilation was facilitated by Pettigrew and Lebow's inclusion of information correlating point types identified during previous investigations into the Elk Creek point typology (Pettigrew and Lebow 1987:8.19, Table 8.2). In some cases, points found during different seasons of investigation and by different investigators have been added together in the site totals. Altogether, 1,354 points were recovered from 22 sites in the Elk Creek Project. Four of the 22 sites produced only a single point; six others produced low frequencies ranging from two to five points.

Projectile points from the 12 sites that yielded samples of 10 or more specimens were subjected to visual seriation (with raw frequencies converted to percentages) to illustrate the distribution of point types in the Elk Creek typology over time and to provide further insight as to the chronological ordering of the sites. In this analysis, three types (TCB, TSB, TSN) were deleted on techno-morphological grounds because they appear to represent incomplete and/or broken specimens rather than finished artifacts. The projectile point type distributions suggest that most of the sites saw some use by native peoples over long periods (Fig. 4). At the same time, the seriation clearly distinguishes four sites (35JA26, 35JA27B, 35JA102, 35JA107) as containing evidence of earlier occupation. Overall, the projectile point type distributions confirm the dominance of evidence from the late prehistoric period in the archaeological record of the lower Elk Creek Valley.[1]

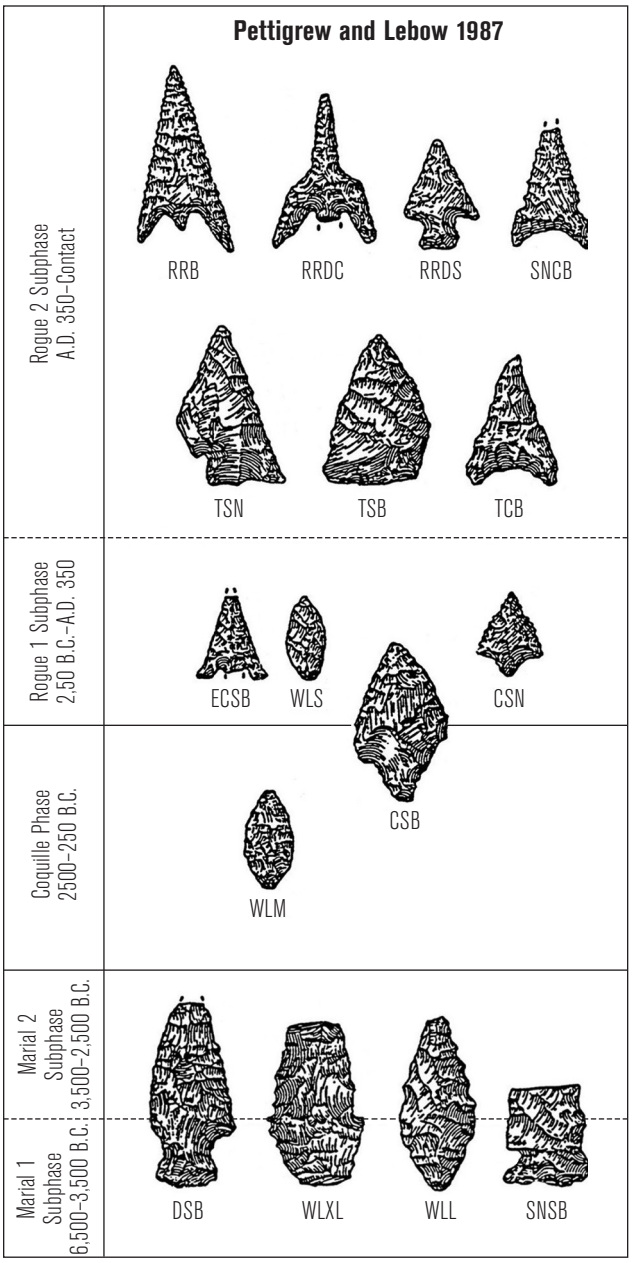

Figure 3. Correlation of projectile point types and cultural phases in the Elk Creek Valley (adapted from Nilsson and Kelly 1991:337, Fig. 25–3).

Radiocarbon Dating

Forty-one radiocarbon dates were obtained during the course of archaeological investigations in the Elk Creek Project (Table 3). Two of these are non-cultural dates intended to establish the age of valley terrace formations. The remaining 39 dates are not evenly distributed. One date was obtained in conjunction with the report on excavations in 1973 by Oregon State University at 35JA26 (Davis 1983:79). Thirty-four dates were obtained from three sites (35JA27A, 35JA59, 35JA100) investigated by INFOTEC Research in 1986 (Pettigrew and Lebow 1987: 10.2–10.3, Tables 10.1 and 10.2). Three more radiocarbon dates were obtained from 35JA101 as a result of investigations by Mountain Anthropological Research in 1989 (Nilsson and Kelly 1991:324, Table 25-1). With the exception of the two dates obtained for geoarchaeological purposes, all of the radiocarbon dates associated with prehistoric occupation in the lower Elk Creek Valley fall into the time span of the Rogue 2 subphase (A.D. 350 to contact).[2]

Obsidian Studies

Obsidian does not occur naturally in the Rogue River drainage, so obsidian found at prehistoric sites in the Elk Creek Valley was introduced either through trade or through procurement expeditions to distant sources. In conjunction with the archaeological investigations undertaken in the Elk Creek Project, Richard E. Hughes conducted XRF sourcing analysis on a total of 354 specimens from 18 sites. The sampling strategies employed in selecting items for XRF analysis varied, and the results are not necessarily representative of the obsidian tools and debitage at any particular site (Pettigrew and Lebow 1987:9.3).

The 354 specimens were traced to eight identified sources. The bulk of the obsidian originates from three sources: Spodue Mountain (35.3%), Silver Lake/Sycan Marsh (33.6%), and Grasshopper Flat/Red Switchback/Lost Iron Well (27.1%). Obsidian from five other identified sources is sparsely represented: East Medicine Lake (1.7%), Glass Mountain (0.8%), Cougar Butte (0.3%), Drews Creek/Butcher Flat (0.3%), and Blue Mountain (0.3%). Two specimens (0.6%) were traced to "other sources" not identified (Hughes 1986, 1987, 1991).

Obsidian hydration analysis was employed extensively in the course of the archaeological investigations

Table 3

RADIOCARBON DATES FROM NATIVE AMERICAN ARCHAEOLOGICAL SITES IN THE ELK CREEK PROJECT

Site	Date B.P.	Calibrated Calendric Date (Max. Range & Intercepts, One Sigma)	Lab No.	Associations
JA26	1,250 ± 90	A.D. 664 (735, 772) 887	GaK-5092	Earth oven
JA27A	0 ± 50	A.D. 1955 (1955) 1955	Beta-19447	Str. 1, Lev. 2
JA27A	130 ± 70	A.D. 1665 (1689, 1725, 1810, 1926, 1955) 1955	Beta-20679	Str. 1, Lev. 5
JA27A	540 ± 90	A.D. 1303, (1410) 1437	Beta-19450	Str. 1, Lev. 5
JA27A	580 ± 70	A.D. 1285 (1330, 1347, 1393) 1419	Beta-20681	Str. 1, Lev. 6
JA27A	720 ± 90	A.D. 1222 (1279) 1385	Beta-19451a	Str. 1, burial
JA27A	790 ± 120	A.D. 1069 (1257) 1280	Beta-19758b	Str. 2, near F2A
JA27A	1,090 ± 140	A.D. 776 (979) 1148	Beta-20680b	Str. 2
JA27A	1,620 ± 80	A.D. 264 (423) 537	Beta-19448	Str. 2, F5
JA59	modern		Beta-13824	Str. 2, H1
JA59	10 ± 60	A.D. 1898, (1955) 1955	Beta-19452	House fill
JA59	420 ± 60	A.D. 1428 (1443) 1492	Beta-20685b	House fill
JA59	500 ± 90	A.D. 1337 (1422) 1447	Beta-20684b	House fill
JA59	510 ± 80	A.D. 1327 (1418) 1442	Beta-19548	House fill
JA59	130 ± 80	A.D. 1662, (1689, 1725, 1810, 1926, 1955) 1955	Beta-20683	House floor
JA59	330 ± 80	A.D. 1446 (1521, 1590, 1623) 1650	Beta-20682b	House floor
JA59	920 ± 100	A.D. 1000 (1044, 1090, 1122, 1139, 1152) 1220	Beta-13823	Just > floor
JA59	740 ± 50	A.D. 1235 (1277) 1282	Beta-13822	Central hearth
JA59	2,230 ± 200	516 (359, 286, 284, 271, 261, 241, 253) 4 B.C.	Beta-20071	Catkins Terrace formation
JA100	410 ± 80	A.D. 1425 (1446) 1623	Beta-19762	HS1 floor, F33
JA100	660 ± 90	A.D. 1264 (1284) 1395	Beta-19763	HS1 post, F26
JA100	750 ± 80	A.D. 1214, (1264, 1268, 1276) 1284	Beta-20691b	HS2 upper, fill
JA100	220 ± 90	A.D. 1528 (1659) 1955	Beta-20687	HS2 upper, floor
JA100	810 ± 70	A.D. 1160 (1223) 1277	Beta-20688	HS2 lower, fill
JA100	1,150 ± 85	A.D. 774 (889) 985	DIC-2691	HS2 lower floor?
JA100	50 ± 60	A.D. 1695 (1955) 1955	Beta-19435	HS3, burial
JA100	130 ± 70	A.D. 1665 (1689, 1725, 1810, 1926, 1955) 1955	Beta-19434	HS3 post
JA100	190 ± 70	A.D. 1647 (1668, 1751, 1758, 1777, 1796, 1947, 1953) 1955	Beta-19437	HS3, burial
JA100	390 ± 70	A.D. 1434 (1455) 1629	Beta-19433	HS3, burial
JA100	490 ± 120	A.D. 1320 (1426) 1487	Beta-19432	HS3 floor
JA100	750 ± 60	A.D. 1222, (1264, 1268, 1276) 1282	Beta-20689b	HS3 floor
JA100	780 ± 120	A.D. 1132 (1259) 1280	Beta-20762b	HS4 wall
JA100	450 ± 80	A.D. 1412 (1437) 1487	Beta-19431	HS4 fill
JA100	580 ± 60	A.D. 1299 (1330, 1347, 1393) 1416	Beta-19445	HS4 floor
JA100	700 ± 80	A.D. 1259 (1280) 1387	Beta-20686b	HS4 floor
JA100	1,070 ± 110	A.D. 782 (983) 1146	Beta-20693	Depression 5
JA100	2,540 ± 70	800 (787, 772, 668, 665) 451 B.C.	Beta-19442	Unit 130N/60W
JA100	7,360 ± 120	6,381 (6,174) 6,090 B.C.	Beta-20218	Homestead Terrace formation
JA101	680 ± 90	A.D. 1260 (1282) 1391	Beta-35203	F1
JA101	950 ± 90	A.D. 994 (1033, 1143, 1147) 1192	Beta-35201	Above F1
JA101	1,210 ± 120	A.D. 670 (778, 792, 800) 980	Beta-35202	F1

a = AMS Technique b = extended counting time

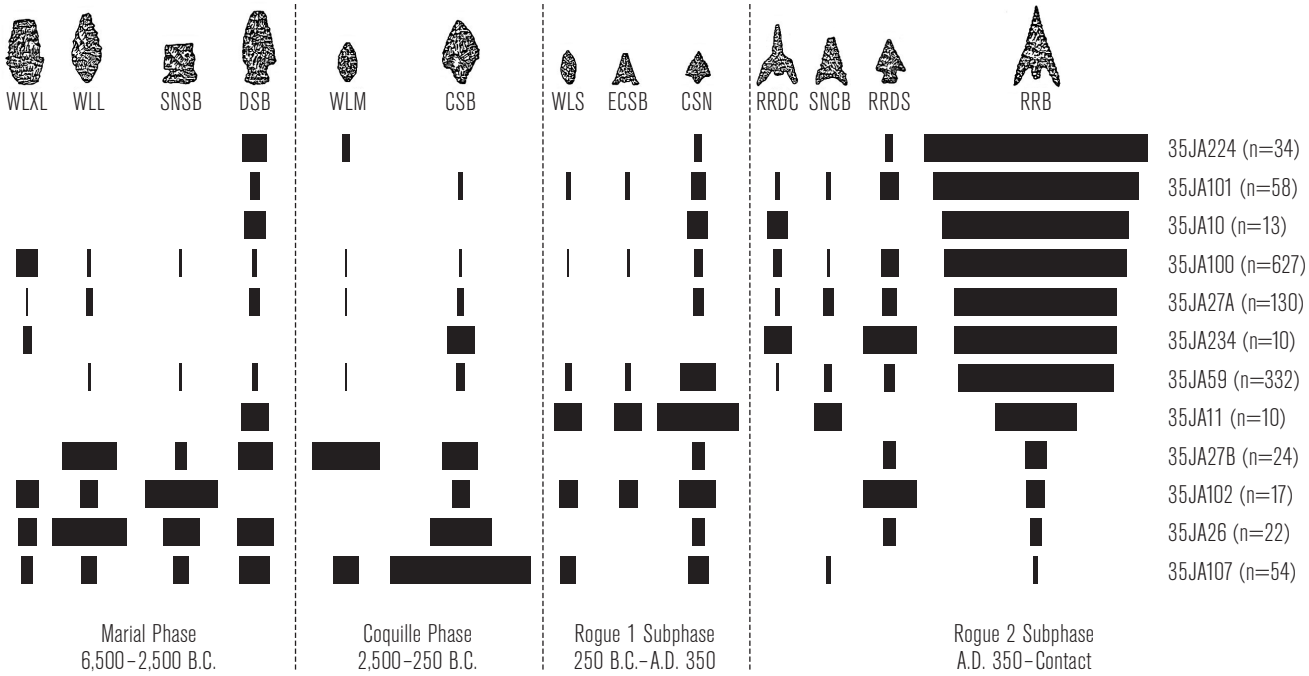

Figure 4. Seriation of projectile point types from Elk Creek sites.

in the Elk Creek Project as a means of developing a relative chronology of cultural phases/subphases and projectile point types, and a chronological ordering of site occupations. In conjunction with the archaeological investigations in the Elk Creek Project, hydration measurements were obtained from a total of 389 obsidian specimens from 18 sites (Jackson 1986; Origer 1987, 1991).

Of the 389 obsidian specimens subjected to obsidian hydration analysis, 272 are from identified XRF sources. Most of these specimens are from the most frequently represented sources: Spodue Mountain (36.0%), Silver Lake/Sycan Marsh (29.8%), and Grasshopper Flat/ Red Switchback/Lost Iron Well (30.97%). Only a small number of specimens were analyzed from the less represented sources: East Medicine Lake (2.2%) and Glass Mountain (1.1%). A substantial number of specimens subjected to hydration analysis (n=117) were not subjected to XRF sourcing analysis.

As a result of differences in chemical composition and other factors, obsidian from different sources generally hydrates at different rates, requiring the calculation of source-specific hydration rates. An attempt was made by Zeier (1986) through induced hydration to determine a source-specific rate for Grasshopper Flat obsidian. Subsequent analyses based on statistical examination of archaeological data found that, as first suggested by Pettigrew and Lebow (1987:9.11), obsidians from the three main sources represented "have roughly equivalent hydration rates in the Elk Creek area" (Nilsson and Kelly 1991:341). Stated another way, "all three of the major obsidian source materials identified (Grasshopper Flat, Spodue Mountain, and Silver Lake/ Sycan Marsh) reflect similar hydration ranges, gaps, and clusters" (Nilsson and Kelly 1991:341). Pettigrew and Lebow proposed two hydration rates for the lower Elk Creek Valley, neither of which is source specific (Pettigrew and Lebow 1987:10.23–10.27).

Obsidian hydration analysis in connection with the Elk Creek Project proved most useful as a relative dating method, rather than as an absolute dating technique. Based on the results of hydration on both tools and debitage, Pettigrew and Lebow suggested an hydration range from 1.0 to 2.6 microns for the Rogue phase, and a range from 3.2 to 3.9 microns for the Coquille phase, "and possibly the latter part of the Marial 2 subphase" (Pettigrew and Lebow 1987:10.31). Presumably, clusters of hydration measurements greater than 3.9 microns may indicate occupation during the Marial phase. Nilsson and Kelly proposed the same hydration range from 1.0 to 2.6 microns for the Rogue phase, but differed in proposing

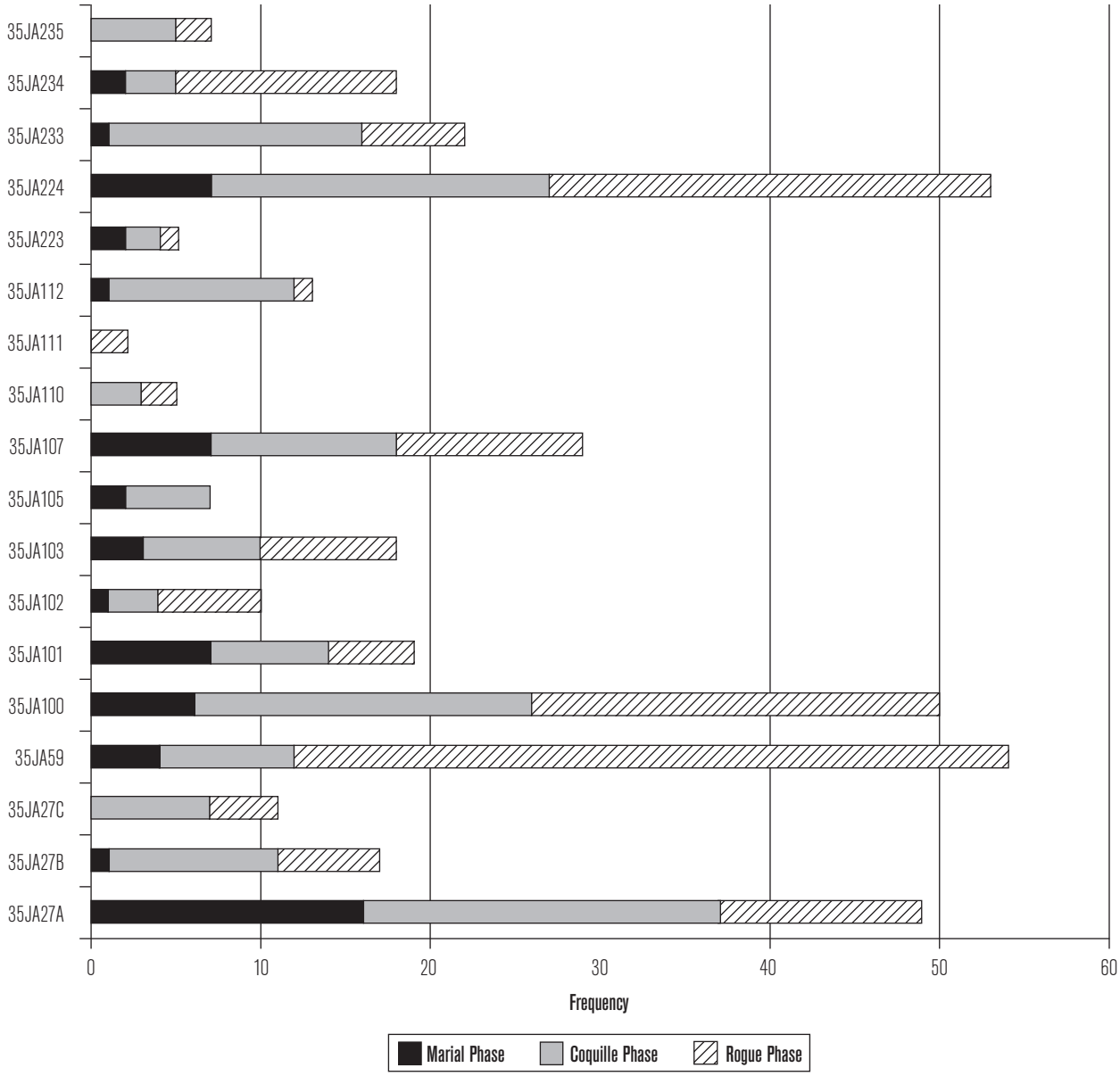

Figure 5. Summary of obsidian hydration measurements by cultural phases.

a more sizable range "from 2.7 to at least 3.9 microns, possibly to 4.3 microns," for the Coquille phase (Nilsson and Kelly 1991:340). In the absence of archaeological radiocarbon dates more than 2,000 years old, the obsidian hydration measurements provide a relative dating method for comparing the time spans represented at sites investigated in the Elk Creek Project (Fig. 5).

Cultural Chronology Summary

No evidence was found during the series of archaeological investigations of any activity in the lower Elk Creek Valley during the *Paleo-Indian stage*, or during the earliest *Archaic stage* manifestations, which fall into the time span of the *Applegate phase* (8,500 to 6,500 B.C.). The earliest activity by prehistoric peoples in the lower Elk Creek Valley may have occurred during the *Marial phase* (6,500 to 2,500 B.C.), or more specifically during the latter portion of this phase. The Marial phase was named for the Marial site, located on the Rogue River downstream from Grants Pass, which has produced the longest record of prehistoric occupation in southwest Oregon (Griffin 1983; Schreindorfer 1985).[3] Projectile

point cross-dating with point types found at the Marial site supports the idea that occupation at several sites in the lower Elk Creek Valley (35JA26, 35JA27B, 35JA102, 35JA107) may have begun during the Marial 2 subphase (3,500 to 2,500 B.C.).

A more conservative estimate of the time depth for prehistoric occupation in the lower Elk Creek Valley is suggested by Nilsson and Kelly, as in their view "intense occupation of the Elk Creek area is probably no older than the beginning of the Coquille phase, or about 2,500 B.C." (Nilsson and Kelly 1991:344). However, obsidian hydration data from at least six sites (35JA27A, 35JA59, 35JA100, 35JA101, 35JA107, 35JA224) are consistent with the idea that some, apparently light, use of the lower Elk Creek Valley occurred during the earlier Marial phase.

Evidence of occupation in the lower Elk Creek Valley first became widespread during the *Coquille phase* (2,500 to 250 B.C). This phase is named after the Coquille Series Broad-necked (CSB) projectile point, which first appeared during this phase. At least five sites (35JA26, 35JA27A, 35JA27B, 35JA59, 35JA100) were identified as containing evidence of "intense occupation" during the Coquille phase (Pettigrew and Lebow 1987:10.20, Table 10.7). Almost all of the sites with obsidian hydration measurements (except 35JA11) appear to have experienced some level of activity during the Coquille phase (see Fig. 5).

Most of the evidence of occupation in the Elk Creek Valley pertains to the *Rogue phase* (250 B.C. to post-contact). All of the sites for which obsidian hydration measurements are available show some occupation during this phase (see Fig. 5). According to Pettigrew and Lebow (1987:Table 10.7), only two sites (35JA59, 35JA101) in the lower Elk Creek Valley with evidence of intense occupation during the Coquille phase continued to show intense occupation in the following Rogue 1 subphase (250 B.C. to A.D. 350). Four other Coquille phase sites show a decline to "light occupation" during the Rogue 1 subphase (35JA26, 35JA27A, 35JA27B, 35JA107). Site 35JA11 was apparently first inhabited and exhibits intense occupation only during this time, and "may be the purest representative of the Rogue 1 subphase" (Pettigrew and Lebow 1987:10.21).

During the Rogue 2 subphase (A.D. 350 to post-contact), three long-occupied sites (35JA26, 35JA27B, 35JA107) declined significantly in use, and 35JA11 went from intense occupation during the Rogue 1 subphase to light occupation during the Rogue 2 subphase. On the other hand, at least five sites contain evidence of intense occupation during the Rogue 2 subphase (35JA10, 35JA27A, 35JA59, 35JA100, 35JA101), making the Rogue 2 subphase the "best represented cultural period in the region" (Pettigrew and Lebow 1987:10.21).

Occupation in the lower Elk Creek Valley by native peoples apparently ceased at the end of the Rogue 2 subphase. None of the sites investigated in the lower Elk Creek Valley produced evidence in the form of Euro-American trade goods indicating continued use of the lower valley during the Rogue 3 subphase. The long record of occupation in the lower Elk Creek Valley by native peoples apparently ended before contact occurred when Euro-Americans entered the region in the mid-nineteenth century.

SETTLEMENT AND SUBSISTENCE

As discussed in Winthrop's study of prehistoric settlement patterns in Southwest Oregon, archaeologists working in the region envision prehistoric settlement and subsistence as involving a sequence of two patterns that differ from one another in terms of mobility versus sedentism, intensity of resource use, and presence/absence of food storage (Winthrop 1993:45–76). In the earlier pattern, prehistoric peoples were more mobile and did not rely significantly on food processing and food storage to carry them through the winter. In the later pattern, based on the ethnographic record, prehistoric peoples were semi-sedentary, and they intensively processed and stored foods for consumption over the winter (Winthrop 1993:76–77). In terms of the two settlement and subsistence patterns, the earlier, more mobile pattern is represented only by seasonal camps and task sites, while the later, more sedentary pattern includes these two site types plus villages (Winthrop 1993:77). Identifying and dating the shift from the earlier, more mobile, pattern to the later, semi-sedentary pattern was a major research issue during the Elk Creek Project investigations, and included consideration of the distribution of various types of settlements across the landscape, analysis of the artifact assemblages recovered, and identification of faunal and botanical remains.

Settlement Pattern

Of the 29 Native American archaeological sites classified as to function, 21 are situated on the west side of Elk Creek. Included among these 21 sites are all of those classified as villages and seasonal camps, as well as more than half of the task sites. All of the sites on the east side of Elk Creek are classified as task sites. Sites classified as villages or village/seasonal camp tend to be located on upper terraces or knolls 20 m. or more above the current Elk Creek flood plain. Less intensively occupied seasonal camps and task sites occur on both upper and lower terraces without apparent pattern.

The tendency for most of the sites to be found on the west side of the valley was noted early in the archaeological investigations for the Elk Creek Project (Brauner and Lebow 1983:172–173). The west side is better watered, with two perennial streams (West Branch Creek and Alco Creek), numerous seasonal streams flowing into the summer, and year-round springs. The west side tends to be steeper, with varied plant communities occupying a range of microenvironments within easy traveling distances from the valley floor. In contrast, the east side tends to be less steep, and the streams and springs are mostly seasonal. Vegetation on the east side reflects these more xeric conditions, with more open grasslands, scattered oak trees, and coniferous forest at higher elevations.

Although there is no sharp boundary, the sites in the lower Elk Creek Valley appear to occur in two clusters, one in the south and one in the north (see Fig. 2). The south cluster is around the confluence of West Branch Creek and Elk Creek, roughly 4 km. upstream from the confluence of Elk Creek with the Rogue River. This cluster of sites, in the lower and wider part of the valley, includes one definite village (35JA100) and two sites that also likely represent villages although the presence of housepits could not be confirmed (35JA27A, 35JA101). The north cluster is around the confluence of Alco Creek and Elk Creek, roughly 9 km. upstream from the confluence of Elk Creek with the Rogue River. This cluster of sites, in the upper and narrower part of the valley, includes only one definite village (35JA59). Although the total number of recorded sites in the south and north clusters is roughly equal, and the number of seasonal camps and task sites is about the same, the presence of more sites that appear to have served as villages in the south cluster conveys the definite impression that more people lived in the south than in the north part of the valley.

Artifact Assemblages

A compilation of data on selected artifact classes recovered indicates that flaked stone artifacts dominate the assemblages from the Elk Creek sites (Table 4). Some of these sites, particularly the villages, yielded exceptionally high numbers of projectile points, consistent with an adaptation focused on hunting. Bifaces, cores, and debitage were common, with other flaked stone tool classes (e.g., scrapers, gravers, used flakes) also strongly represented.

Ground stone tools associated with the processing of plants were found at 16 of the Elk Creek sites, though at five sites these artifacts were limited to single specimens (Table 5). Manos (n=205) and metates (n=144) were most common, with pestles (n=41), hopper mortars (n=6), and bowl mortars (n=4) also represented. Most of the ground stone tools (313 or 82%) were recovered from villages (35JA59=97, 35JA100=134, 35JA27A=101, 35JA101=37), indicating that most milling of botanical resources took place in the main settlements rather than in seasonal camps or task sites.

Manos and metates are associated with seed and/or other plant resource grinding, while pestles, hopper mortars, and perhaps stone bowls were used to pulverize acorns, dried camas roots and bulbs, and small game (Holt 1946; Sapir 1907). The much higher frequency of manos and metates indicates that seeds, rather than acorns, were the primary plant resources processed at the Elk Creek sites. The ground stone artifacts recovered lack stylistic embellishments reported on ground stone artifacts elsewhere in southwest Oregon. It is worth noting, however, that "local collectors report finding decorated ground discs, bowl mortars, and ringed pestles from the same sites in Elk Creek where little groundstone was found in test excavations" (Juell 1986:287).

Faunal Remains

Direct evidence of the fauna hunted from the Elk Creek sites varied from site to site, apparently reflecting the intensity of occupation and/or site function. For example, data recovery excavations in 1985 at 35JA102 (a task site) and 35JA107 (a seasonal camp) recovered "only a handful

Table 4

FREQUENCIES OF SELECTED ARTIFACTS FROM ELK CREEK PROJECT SITES[a]

Site Type/Site	Projectile Points	Bifaces	Total Flaked Stone	Total Ground Stone	Other Cobble Tools	Cores	Debitage
Village							
35JA59	522	634	2,209	97	64	322	29,210
35JA100	989	1,113	4,168	134	177	535	53,800
Village/Seasonal Camp							
35JA27A	196	315	1,397	101	119	147	26,585
35JA101	56	79	251	37	29	26	7,622
Seasonal Camp							
35JA26	29	15	250	15	39	26	ND
35JA107	101	115	383	26	54	51	10,287
35JA108	13	0	47	1	1	5	
35JA224	43	76	213	4	9	21	6,243
Seasonal Camp/Task Site							
35JA10	20	11	67	0	1	0	617
35JA27B	31	99	442	23	25	40	8,560
Task Site*							
35JA10C	0	2	25	0	0	0	315
35JA10D	0	1	2	0	0	1	143
35JA11	1	14	28	5	2	11	855
35JA27C	0	1	2	0	0	0	168
35JA28	1	3	16	0	1	5	294
35JA102	36	19	102	3	5	8	1,784
35JA103	5	13	39	0	0	5	1,177
35JA104	2	16	87	1	6	3	1,645
35JA105	0	2	5	1	0	1	383
35JA109	2	2	24	0	1	2	138
35JA110	1	1	0	0	0	0	219
35JA111	0	2	6	0	0	3	209
35JA112	4	11	21	1	0	1	2,132
35JA223	1	0	1	0	0	2	121
35JA232	0	2	4	0	0	0	29
35JA233	4	19	60	1	1	8	2,150
35JA234	12	18	38	2	2	2	1,086
35JA235	3	6	15	0		1	561

[a]Five sites (35JA29, 35JA106, 35JA113, 35JA225, 35JA 231) are not included because of insufficient data. ND = no data

of osteological remains," with 15 bones found at 35JA102 and 16 bones found at 35JA107 (Schmitt 1986). In contrast, over 26,000 faunal remains were recovered from the four sites subjected to data recovery excavations in 1986, which included 35JA27A (a village or seasonal camp), 35JA27B (a seasonal camp or task site), 35JA59 (a village), and 35JA100 (a village). Due to poor preservation and severe fragmentation, only 650 of these remains were identifiable (Lyman 1987). Faunal remains were found at 13 of the 17 sites tested during the last season of investigations in 1989, but of the 3,048 individual pieces of bone recovered, only 49 elements were identifiable (MacDougall 1991).

Deer were the most frequently represented fauna, constituting 81% to 96% of the identifiable specimens

Table 5

SUMMARY OF GROUND STONE TOOLS RECOVERED FROM ELK CREEK PROJECT SITES

Site Type/Site	Manos	Metates	Bowl Mortar	Hopper Mortars	Pestles	Unclassified Fragments	Debitage
Village							
35JA59	49	11		2	3	32	97
35JA100	78	40	3	1	12		134
Village/Seasonal Camp							
35JA27A	42	48		2	9		101
35JA101	5	9			8	15	37
Seasonal Camp							
35JA26	4	10	1				15
35JA107	12	9	1		1	3	26
35JA108		1					1
35JA224	1	1			1	1	4
Seasonal Camp/Task Site							
35JA27B	9	13			1		23
Task Sites							
35JA11		1			4		5
35JA102	2				1		3
35JA104					1		1
35JA105	1						1
35JA112						1	1
335JA233	1						1
35JA103	5	13	39	0	0	5	1,177
35JA104	2	16	87	1	6	3	1,645
35JA105	0	2	5	1	0	1	383
35JA234	1	1					2
35JA235	3	6	15	0		1	561
Totals	**205**	**144**	**5**	**5**	**41**	**52**	**452**

from the four sites investigated in 1986 (Lyman 1987:D.23). Also represented, usually in very small numbers, were a terrestrial gastropod, western pond turtle, swans, geese or ducks, salmon or steelhead, pocket gopher, western gray squirrel, muskrat, rabbit or hare, beaver, mountain lion or cougar, coyote or dog, gray fox, bear, and elk (Lyman 1987:D.14; MacDougall 1991:E-1). Analysis of the deer remains suggests that "deer hunting was a year-round activity and that at least 35JA100 and 35JA59 were probably occupied year-round" (Lyman 1987:D.23).

Fish remains were limited to two vertebrae found at 35JA100. Salmon and steelhead presumably ascended and spawned in Elk Creek during prehistoric times, but in view of the relatively low flow of this stream the fish runs probably were not large and consisted mostly of relatively small individuals (Lyman 1987:D.4). Procurement of fish on a large scale would have required the prehistoric inhabitants of the lower Elk Creek Valley to move to fishing stations along the main stem of the Rogue River.

Botanical Remains

Flotation analyses of bulk soil samples to recover archaeobotanical remains met with variable results. Bulk samples from two profile columns each from 35JA102 (a task site) and 35JA107 (a seasonal camp) did not yield any carbonized seeds that might have been associated with prehistoric occupation (Budy 1986). On the other hand, soil samples from the four sites (35JA27A,

Figure 6. View southeast, showing excavations at 35JA59, a prehistoric village on the west side of Elk Creek, in 1986.

35JA27B, 35JA59, 35JA100) subjected to data recovery excavations in 1986 yielded 22 kinds of charred seeds and 10 distinct types of wood charcoal (Davis and Miksicek 1987). Lambsquarter or goosefoot seeds were most common, followed by manzanita, madrone, ryegrass, and huckleberry or blueberry seeds. In addition to botanical remains recovered from flotation samples, 27 charred acorns subsequently identified as from Oregon white oak were recovered from a pit filled with fire-cracked rock at 35JA100 (Pettigrew and Lebow 1987:6.63–6.64).

Carbonized botanical remains recovered from nine Elk Creek sites subjected to test excavations in 1989 included 78 seed and fruit fragments (Wohlgemuth 1991). Manazanita seeds and pine nutshells were most abundant. Acorns, thought to have been an important food for the Takelma (Sapir 1907:257), were represented by shells found in small quantities at four sites (35JA101, 35JA105, 35JA224, 35JA232). Other species also found in low abundance at these sites included goosefoot and elderberry seeds.

HOUSES

Depressions in the ground identified as possible housepits were observed at ten sites, but test excavations were able to confirm the presence of these features at only two sites. At 35JA59, one housepit was excavated, but others may have been destroyed during construction of Elk Creek Road (Fig. 6). At 35JA100, four housepits (one with two floors) were excavated and two others profiled. The housepit occupations at both 35JA59 and 35JA100 date to the Rogue 2 subphase. In view of the small number of housepits that appear to have been inhabited, it has been suggested that these settlements may represent the settlements of small extended families and therefore might more appropriately be referred to as "homesteads" or "hamlets" rather than villages (Pettigrew and Lebow 1987:4.5–4.6).

It is noteworthy that the five housepits documented at 35JA59 and 35JA100 were not visible on the surface, but instead were found in backhoe trench excavations.[4] Housepits visible on the surface were targeted by relic

Table 6

SUMMARY OF INFORMATION ABOUT NATIVE AMERICAN HOUSES IN THE ELK CREEK PROJECT

Site No.	Description	Dimensions	Associated Features
35JA59			
House 1	Roughly circular, maximum depth 70 cm., level to slightly sloping floor, steeply sloping wall on west gave way to gently sloping, bowl-shaped floor extending to east edge, which appeared to be straight.	5.5 m. N–S by 5.0 m. E–W	Central hearth roughly circular, 1 m. in diameter, 18 cm. deep, not rock-lined; two possible post holes, 3 pits in floor.
35JA100			
House 1	Roughly circular, relatively flat floor packed with fine-grained sediments; one area of packed clay on floor.	Upper walls: 4.75 m. N–S by 4.60 m. E–W Lower Walls: 3.8 m. by 4.0 m.	Central hearth; two possible structural members (posts) along north wall; chunks of charred bark on floor.
House 2 (Upper)	Roughly circular, bowl-shaped, dish-shaped floor, slightly sloping, relatively steep walls.	Outer walls average 4.5 m.; floor diameter average 4.0 m.	Hearth apparently just north of center; possible structural member in SW wall.
House 2 (Lower)	"Rectanguloid" shaped floor with roughly straight, parallel walls and slightly convex ends; floor was relatively flat but still slightly sloping and packed with fine-grained sediments; the walls were relatively steep, creating a bowl-shaped appearance.	Long axis NW–SE 6.2 m.; short axis 4.3 m.	Central hearth, possible post molds, apparent raised "bench" along NW corner.
House 3	Roughly circular, maximum depth 51 cm., bowl-shaped with relatively steep walls and a relatively flat floor, packed with fine-grained sediments.	4.8 m. N–S by 5.5 m. E–W.	Central hearth may have been removed by backhoe; chunks of charred bark on floor.
House 4	Roughly circular, maximum depth 91 cm., bowl-shaped in cross-section, steeply sloping walls and floor slightly sloping toward center of depression, floor packed with fine-grained sediments.	4.8 m. diameter at base of walls, 5.2 m. diameter at top of walls.	Central rock-lined hearth, chunks of charred bark on floor; series of small pits in floor.

collectors. Housepits were apparently destroyed by looters before they could be investigated at two more sites, 35JA27A and 35JA101. As previously noted, because the presence of housepits was not confirmed, these sites were classified as villages or seasonal camps (see Table 2).

The five prehistoric houses investigated were all semi-subterranean, with four being roughly circular and one described as "rectanguloid" in shape (Table 6). The three circular housepits at 35JA100 ranged from 3.8 m. to 4.8 m. in diameter, while the circular housepit at 35JA59 was slightly larger, with dimensions of 5.5 m. by 5.0 m. The rectanguloid housepit at 35JA100 measured 6.2 m. by 4.3 m. The depth of the housepits ranged from 38 cm. to 56 cm., with an average depth of 49 cm. Four of the five house floors represented at 35JA100 were packed with fine-grained sediments (clayey soil). All of the house floors had a central hearth, but only one hearth (House 4 at 35JA100) was rock-lined (Fig. 7). Chunks of charred pine bark found on some floors suggest that the superstructures may have been covered with pine bark as well as earth. No evidence of entryways was found (Pettigrew and Lebow 1987:11.54–11.55).

The prevalence of circular houses in prehistoric times contrasts with the rectangular shape of houses reported ethnographically for the Takelma (Sapir 1907:262–263). The rectanguloid house at 35JA100 was associated with radiocarbon dates of 810 ± 70 B.P. and 1,150 ± 85 B.P., and is actually one of the older houses in the region. The archaeological evidence from the Elk Creek Valley indicates that in prehistoric times circular pithouses were the norm.

CERAMICS

Archaeological investigations during the Elk Creek Project recovered the largest collection yet found of ceramics classified as a variant of Siskiyou Utility Ware, first identified on the Upper Klamath River by Mack (1978). These ceramics, which include both potsherds and figurine fragments, were discovered at four settlements in the lower Elk Creek Valley (Table 7). Significantly, all of the settlements where ceramics occur appear to represent villages. By far the single largest site collection was recovered from 35JA100, where potsherds and figurine

Figure 7. View of House Site 4 at 35JA100, a prehistoric village on the west side of Elk Creek, at the conclusion of excavations in 1986.

Table 7

DISTRIBUTION OF CERAMICS AT NATIVE AMERICAN ARCHAEOLOGICAL SITES IN THE ELK CREEK PROJECT[a]

Sites	Pot Sheds	Figurines	Totals
35JA27A	82	5	87
35JA59	1	1	2
35JA100	531	21	552
35JA101	41	2	43
Totals	**655**	**29**	**684**

[a]Data from Mack (1987, 1991)

fragments were mostly recovered from pithouses, many directly associated with house floors. Among these was an almost complete pot from House Site 2.

In her study of the potsherds and figurines from the Elk Creek sites, Mack examined ceramics found elsewhere in the region, many in the hands of private collectors who looted them from archaeological sites. The most common vessel shape is a wide-mouthed shallow bowl. Figurines of this ware "are often realistic representations of fish, birds and mammals, including humans. There are also several geometric forms" (Mack 1987:J.21–J.22).

Pottery classified as Siskiyou Utility Ware has been recovered from substantial settlements (pithouse villages and base camps) in the drainages of the upper Rogue River, the Upper Klamath River, and the middle Pit River (Mack 2011:115). Figurines have a similar, but somewhat wider, distribution than the pottery (Mack 1990:127, Fig. 3; Mack 2011:128, FN 2).

The Elk Creek sites represent the earliest known occurrence of Siskiyou Utility Ware. Radiocarbon dates from the Elk Creek sites containing ceramics contributed significantly to establishing the time span over which Siskiyou Utility Ware was made in southwest Oregon. This information led to the recognition of a separate Rogue 2 Ceramic Period, estimated to date from A.D.

900 to 1300 or 1500, during which an independent ceramic horizon existed in the southern Cascades of Oregon and California (Mack 1987:J22).

MORTUARY PRACTICES

Relatively little information was obtained about the mortuary practices of the prehistoric inhabitants of the Elk Creek Valley. Human burials were encountered at only two sites. Both of the sites where burials were found were reported to contain housepits (Pettigrew and Lebow 1987:6.90–6.97). A secondary interment, consisting of the disarticulated remains of a female estimated to have been between 30 and 40 years of age, was found in a pit uncovered at 35JA27A (Hemphill 1987). Charred remains within a dense concentration of charcoal at 35JA100 were identified as a human cremation; the remains were probably those of a female who was a young adult at time of death (Pastor 1987).

DISCUSSION

As previously noted, there is debate as to when prehistoric activity began in the lower Elk Creek Valley, with Pettigrew and Lebow favoring an initial occupation at some sites (35JA26, 35JA27A, 35JA27B, 35JA100) beginning during the Marial 2 subphase (3,500 to 2,500 B.C.), and Nilsson and Kelly arguing that "intensive occupation of the Elk Creek area [is] probably no older than the beginning of the Coquille phase, or about 2,500 B.C." (Nilsson and Kelly 1991:344).[5] Regardless of how far back in time it extends, the archaeological record in the lower Elk Creek Valley suggests a strong degree of cultural continuity from the beginning of the Coquille phase (2,500 to 250 B.C.) and continuing through the Rogue phase (250 B.C. to post-contact), a period spanning 4,000–5,000 years before the arrival of Euro-Americans.[6]

In the absence of radiocarbon dates that extend back that far in time, estimates of the time depth of prehistoric occupation are based largely on cross-dating of particular projectile points (e.g., Pettigrew and Lebow 1987:Table 10.7). The earliest assemblages in the lower Elk Creek Valley, including possible Marial phase as well as Coquille phase materials, contain projectile points (particularly the Willow Leaf [WL] series and Diverging Stem Broad-necked [DSB] type) that were used in defining the Glade Tradition, an early hunting-gathering culture in evidence as early as 9,000 years ago in southwest Oregon (Connolly 1986, 1988). The Glade Tradition is said to persist to as recently as 1,000 years ago, or later, in the Coquille and Umpqua basins of southwest Oregon (Connolly 1988:253, 256). Apparent discontinuity between Glade Tradition assemblages and those of the following Siskiyou Pattern led to the suggestion that the appearance of the Siskiyou Pattern might indicate a migration of new peoples into the region (Connolly 1988:254–255). The Siskiyou Pattern is seen as the archaeological expression of Native American cultures throughout the interior portion of southwest Oregon and adjacent northern California beginning around 1,700 years ago and continuing to historic contact (Connolly 1988:256).

Perhaps at least in part because of its peripheral location in the upper Rogue River Valley, the archaeological evidence from Elk Creek does not fit this model of new populations entering the region. Although some sites tended to be occupied earlier and others later, the projectile point seriation (see Fig. 4) and, in particular, the obsidian hydration data (see Fig. 5), convey a strong impression of cultural continuity from the Coquille phase to the Rogue phase, with the latter said to represent a local expression of the Siskiyou Pattern. Indeed, assemblages from three Elk Creek sites (35JA27A, 35JA59, and 35JA100) were used in the definition of the Siskiyou Pattern, which is identified by, among other characteristics, pithouse villages, small barbed projectile points, and evidence of long-distance trade in marine shells, obsidian, and other exotic materials (Connolly 1988:254). Although Rogue phase occupations in the lower Elk Creek Valley contain pithouses and barbed projectile points consistent with the definition of the Siskiyou Pattern, marine shells and other exotic materials (other than obsidian) were notably absent in the Elk Creek sites.

Also absent in the Elk Creek sites are large obsidian bifaces associated with a late prehistoric socioceremonial system that linked native peoples in northwest California and southwest Oregon (Hughes 1990). Twenty of these distinctive artifacts were found in Takelma territory at Gold Hill (Cressman 1933a, 1933b), at approximately river mile 120 on the upper Rogue River. Most of the

Table 8

SUMMARY OF OBSIDIAN HYDRATION DATA FROM THE ELK CREEK PROJECT BY SOURCE AND PHASE

	Obsidian Source							
	Southern Oregon			Northern California				
Phase	SP	SL/SM	Total	GF	EML	GM	Total	Grand Total
Rogue phase								
Number	50	25	75	36	1	3	40	115
Percent	43.5%	21.7%	65.2	31.3%	0.9%	2.6%	34.8	100.0%
Pre-Rogue phase								
Number	48	56	104	48	5	0	53	157
Percent	30.6%	35.6%	66.2%	30.6%	3.2%	0%	33.8	100.0%
Grand Total								
Number	98	81	179	84	6	3	93	272
Percent	36.0%	29.8%	65.8%	30.9%	2.2%	1.1%	34.2	100.0%

SP = Spodue Mountain
SL/SM = Silver Lake/Sycan Marsh
GF = Grasshopper Flat/Red Switchback/Lost Iron Well Complex
EML = East Medicine Lake
GM = Glass Mountain

artifacts accompanied human burials, a context similar to that of the first discovery of large obsidian bifaces at Gunther Island in Humboldt Bay (Loud 1918). Although the absence of large obsidian bifaces may be partly due to the fact that only two human burials were encountered in the Elk Creek Project, the absence of these distinctive artifacts in assemblages from the very extensive excavations may be another indication that the prehistoric inhabitants of the Elk Creek Valley lived outside the influence of the socioceremonial system operating elsewhere in the region during the late prehistoric period.

Obsidian studies point to a long-standing connection between the inhabitants of the lower Elk Creek Valley and peoples to the south and east. This connection becomes apparent when the obsidian hydration and obsidian sourcing data are organized according to the earlier pre-Rogue (including the Pre-Coquille and Coquille phase) and Rogue phase (Table 8). As noted previously, obsidian tools and debitage recovered from sites in the lower Elk Creek Valley originated from sources in two different geographic areas (Fig. 8). The relative frequencies of obsidian from sources in southern Oregon during the pre-Rogue (66.2%) and Rogue phase (65.2%), and from sources in northern California during the pre-Rogue (33.8%) and Rogue phase (34.8%), reflect remarkable stability and continuity over time. The hydration and sourcing data thus indicate that the prehistoric inhabitants of the lower Elk Creek Valley obtained obsidian in roughly the same proportions from the same geographic source areas more or less throughout the known span of Native American occupation.

The predominance of obsidian from the Spodue Mountain and Silver Lake/Sycan Marsh sources in the Elk Creek sites suggests a close relationship over the last several thousand years between the ancestors of the Takelma and prehistoric peoples to the east in the Klamath Basin, the ethnographic homeland of the Klamath and Modoc. Like Takelman, the language spoken by the Klamath and Modoc is classified as a language isolate in the Penutian phylum (Kinkade et al. 1998:51). Although generally assigned to different geographic groups of Penutian languages, Takelman with Oregon Penutian and Klamath with Plateau Penutian, it has been observed that closer ties may exist between certain languages across the groups of Penutian languages than within the groups as generally defined (Foster 1996:82). The prehistoric archaeological record indicating ancient *cultural* connections between the ancestors of the Takelma and Klamath may have had a *linguistic* basis as well.

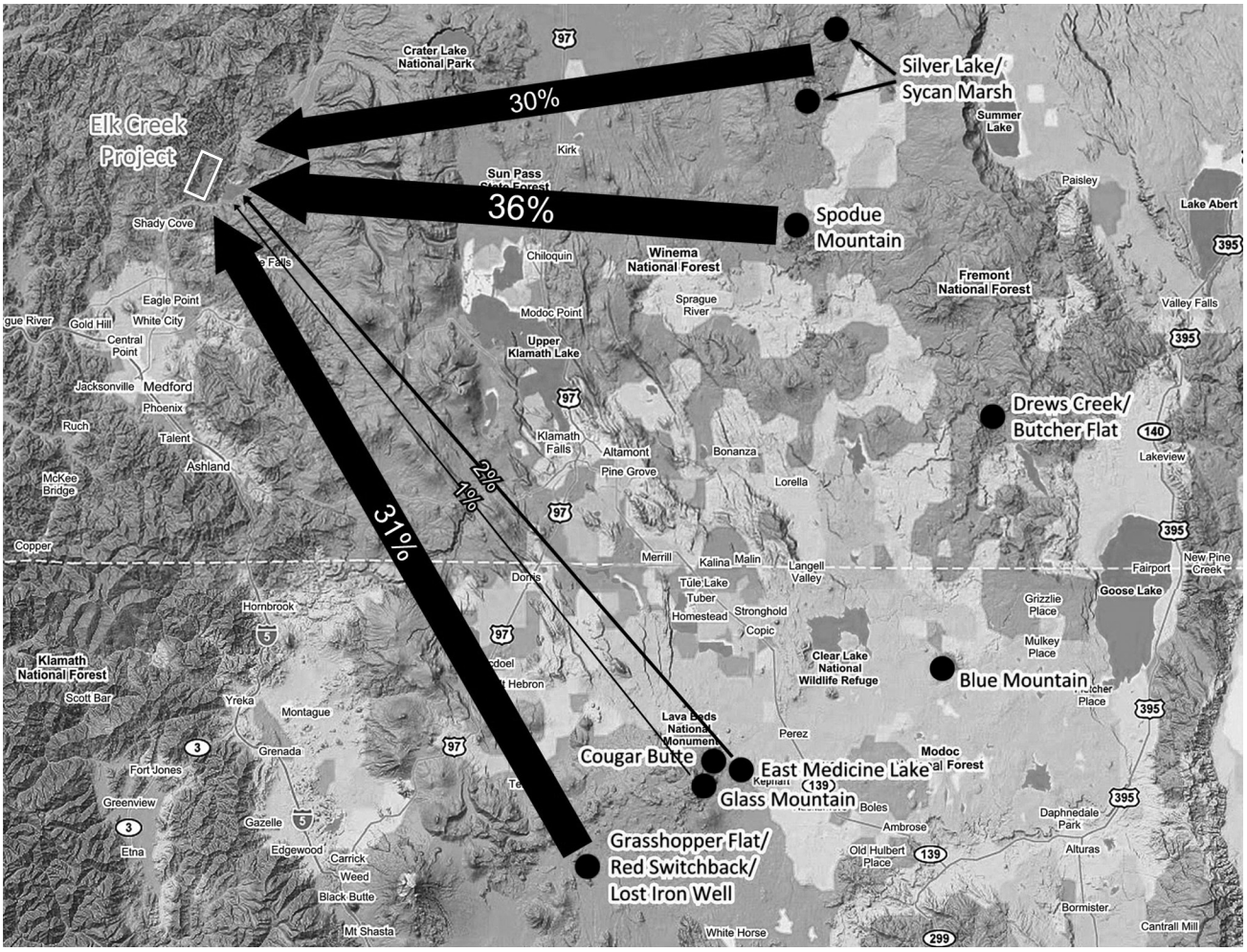

Figure 8. Contributions of various obsidian sources represented at sites in the lower Elk Creek Valley (percentages based on total occurrences; see Table 8).

Close connections between the prehistoric inhabitants of the lower Elk Creek Valley and peoples to the east and south come into clearer focus during the late prehistoric period. The circular pithouses found at 35JA59 and 35JA100 are similar in size and shape to prehistoric houses documented during excavations at sites elsewhere in the upper Rogue River and Klamath River drainages (Pettigrew and Lebow 1987:11.55–11.59). This house type was widely reported among ethnographic peoples situated to the east and south, including the Klamath, Modoc, Shasta and numerous groups farther south in California (Voegelin 1942:64).

The lower Elk Creek Valley stands out from many areas in southwest Oregon by the presence at four sites of the distinctive pottery known as Siskiyou Utility Ware. This ceramic complex has been the subject of numerous studies by Mack, who notes that this ware is found only at pithouse villages and large base camps in the southern Cascades, specifically in the drainages of the upper Rogue River, the upper Klamath River, and the Middle Pit River (Mack 2011:115). Interestingly, Siskiyou Utility Ware is not found in the Klamath Basin, where the Silver Lake/ Sycan Marsh and Spodue Mountain obsidian sources are located (Mack 2011:126). Occurring in a region populated by hunter-gatherers where the archaeological record is largely limited to lithic remains, Siskiyou Utility Ware is interpreted by Mack to represent "a social network marker" signaling the existence of an interaction sphere during late prehistoric times (Mack 2011:115). This interaction sphere is particularly noteworthy because it "included strong north-south or transmontane networks," rather than "east-west or upriver-downriver networks,"

and because it apparently involved native peoples who spoke languages from two different linguistic phyla, the Takelma of the Penutian phylum and the Shasta and Achomawi of the Hokan phylum (Mack 2011:126, 128–129). The manufacture and use of pottery was not documented during ethnographic studies conducted among any of these groups (Mack 2011:115).

CONCLUSIONS

Archaeological research between 1965 and 1989 in connection with the Elk Creek Dam Project documented a record of Native American occupation and activity extending over at least the last 4,000–5,000 years in the foothills of the southern Cascades in southwest Oregon. Situated along a tributary of the Upper Rogue River, the Elk Creek Project was carried out within the territory of the Northern Takelma, a subgroup of the Takelma who were only recently identified and about whom very little is known. Native peoples were probably most attracted to the Elk Creek Valley because of its apparently abundant deer population and its transitional location between the lowlands of the Rogue River Valley and the uplands of the Cascade Range. Elk Creek is a low-volume stream that is unlikely to have supported significant runs of salmon. The valley's prehistoric inhabitants most likely did most of their fishing downstream on the main stem of the Rogue River.

Most of the sites in the Elk Creek Project contain evidence of long-term use over the last several thousand years, for the most part during the Coquille and Rogue phases. The archaeological record, particularly obsidian procurement patterns, conveys a strong sense of cultural continuity over time, and is consistent with the inference from linguistic relations suggesting that occupation by the ancestors of the Takelma has considerable time depth in the region. Because all four settlements classified as villages (35JA59, 35JA100) or villages/seasonal camps (35JA27A, 35JA101) appear to have been occupied over long periods of time, the shift from an earlier, more mobile settlement and subsistence pattern to the later, semi-sedentary pattern is difficult to date precisely. The later pattern was only definitively in evidence at the two sites where pithouses were documented (35JA59, 35JA100), where all of these features dated to the Rogue 2 subphase (A.D. 350 to contact).

The archaeological information available from the Elk Creek Valley contradicts the assignment of the Takelma to the ethnographic Northwest Coast culture area (Kendall 1990; Kroeber 1939). As a result of the long-term perspective provided by archaeological research, it is apparent that any cultural traits found among some groups of Takelma suggesting association with the Northwest Coast culture area, such as rectangular houses (Sapir 1907:262–263), almost certainly were introduced very late in prehistory.

Writing more than 100 years ago, Edward Sapir was correct when he remarked that "many things point to the Takelma as having really formed an integral part of the distinct Californian area..." (Sapir 1907:251). Sapir's interpretation has received support from subsequent archaeological research, notably including the investigations conducted for the Elk Creek Project. In addition to documenting the considerable time depth of occupation by the prehistoric ancestors of the Takelma in the area, archaeological research has identified the Northern Takelma as key participants in a late prehistoric interaction sphere that connected them with native groups living in the southern Cascades to the south in northern California (Mack 2011:126). Although a quarter-century has passed since the last archaeological field investigations were conducted there, the many contributions made by the Elk Creek Project were instrumental in setting the stage for our current understanding of prehistory in the mountainous region along the present-day Oregon-California border.

NOTES

[1]Pettigrew and Lebow's Elk Creek point typology was modified slightly by Nilsson and Kelly (1991:335–336) in their analysis of materials recovered during the last season of investigations in 1989. By my count, this modification affected chronological placement of eight of the 130 points collected. Because incorporation of Nilsson and Kelly's new types would require a re-examination of the projectile point collections from the Elk Creek sites, Pettigrew and Lebow's typology has been used in this paper.

[2]With the exception of one date from investigations in 1973 by Oregon State University at 35JA26, and three dates from investigations in 1989 by Mountain Anthropological Research at 35JA101, all of the other dates in Table 4 are from investigations in 1986 conducted by INFOTEC Research (Pettigrew and Lebow 1987:10.2–10.3). Calibrated ages listed here are as originally reported.

[3]A series of radiocarbon dates in chronological order in terms of depth below surface has been reported from the Marial Site: 2,810 ± 50 B.P. at 60 cm., 5,850 ± 120 B.P. at 190 cm., 6,485 ± 80 B.P. at 250 cm., and 8,560 ± 190 B.P. at 430 cm. (Griffin 1983; Schreindorfer 1985).

[4]The fact that the housepits were not found during manual excavations, but instead by backhoe excavations, is a strong argument in favor of the inclusion of mechanical trenching during archaeological discovery, testing, and data recovery investigations.

[5]Subsequent archaeological investigations in 1988 at two prehistoric sites located a short distance south of the Elk Creek Project along the Upper Rogue River (Connolly et al. 1994), and in 1995 at six sites in the upper portion of the Elk Creek Valley above the COE Elk Creek Project (Ozbun et al. 1996), tend to support Nilsson and Kelly's idea of a more limited time depth. Although older than any of the radiocarbon dates related to prehistoric occupation at sites in the Elk Creek Project, the earliest radiocarbon dates obtained during these projects, 4,450 ± 80 B.P. from 35JA190 (Connolly et al. 1994:166) and 4,460 ± 90 B.P. from 35JA218 (Ozbun et al. 1996:223–224), are consistent with the idea of a time depth of roughly 5,000 years for *substantial* Native American occupation in this interior portion of the Upper Rogue River Valley.

[6]Mark Tveskov of Southern Oregon University has documented occupation more or less throughout the Archaic Period during excavations from 2001 to 2005 at five sites on Bureau of Land Management lands in the Southern Cascades of southwest Oregon (Tveskov and Cohen 2006). Situated at elevations ranging from 620 m. to 1,400 m., these sites have produced everything from large foliate, broad stemmed, and side-notched points to small Gunther-Barbed and other late-style points. The Blue Gulch site, the closest to the COE Elk Creek Project, produced 10 potsherds and 10 figurine fragments consistent with Siskiyou Utility Ware (Mack 2006).

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