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The Raymond's Dune Site and Its Place in the History of Southern Northwest Coast Archaeology

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The Raymond's Dune site (35CU62) in Curry County, Oregon, is mainly known for a radiocarbon assay of 3,000 ± 90 B.P. that for many years was the oldest archaeological radiocarbon date from the southern Northwest Coast. Although often mentioned in the archaeological literature, a comprehensive report on this site was never prepared. This article reconstructs the history of fieldwork at this site, bringing together information about the cultural deposits, pithouse feature, artifacts, and human skeletal remains found there. References to this site by L.S. Cressman and other archaeologists are reviewed and assessed in terms of current information. Although no longer one of the oldest known sites in the region, the Raymond's Dune site retains some importance for its small role in the history of southern Northwest Coast archaeology.

Until the mid-1980s, the earliest radiocarbon date from the southern Northwest Coast (the Pacific coast of southern Washington, Oregon, and northern California) was an assay of 3,000 ± 90 B.P. from 35CU62 near the mouth of Pistol River in Curry County on the southern coast of Oregon. This date, derived from a burned timber collected from a housepit exposed during highway construction in 1961, has never been fully reported. This article presents the information available about 35CU62, referred to here as the Raymond's Dune site, including data on the radiocarbon date's provenience and associations. In clarifying the information available about the Raymond's Dune site, this report is intended as a small contribution to the history of archaeological research on the southern Northwest Coast.¹

FIRST REFERENCE TO THE RAYMOND'S DUNE SITE

The Raymond's Dune site is located a few hundred meters north of the settlement of *Chetlessenten* (also referred to as *Chet-less-chunn-dunn*), a village of the *Chet-less-chunn-dunne* or Pistol River Indians, one of several groups that spoke the Chetco/Tolowa language of the Athapaskan language family (Harrington 1984; Miller and Seaburg 1990:580-581). This village was burned to the ground and its inhabitants scattered in 1856 during the Rogue River Indian War (Chase 1873). The location of *Chetlessenten* was well known, having been visited in the late 1860s and/or early 1870s by A.W. Chase (1873), in 1873 and 1875 by Paul Schumacher (1874, 1877a, 1877b), sometime during the 1880s by O.W. Olney (1887), and in 1935 by Joel V. Berreman (1935a:51-52; 1935b:20).

Although numerous early accounts describe *Chetlessenten*, as well as other archaeological sites in the vicinity, the first definite reference to the nearby Raymond's Dune site dates to the early

1940s. After describing a large site with numerous blowouts located just north of Pistol River, an apparent reference to *Chetlessenten*, Dr. W.T. Edmundson (1942) wrote: "About one mile north of Pistol River, and just south of Raymond's Auto camp is a large shell heap on the ocean bluff.² In a second reference to this site, Edmundson (n.d.) wrote: "#2. A shell heap 1-2 miles north of Pistol River, across the road from Raymond's Auto Camp. Again shell was seaward, ash landward. One point and a 3" segment of a massive clay pipe presented."

Edmundson apparently collected a number of artifacts from this site, including three stemmed and five foliate projectile points, as well as a thumbnail scraper and a bone point. He also recovered a single cranium from a poorly preserved adolescent burial: "About halfway down the dune. Head east up hill. Just under the surface of the sand. On left side, an adolescent, bones badly broken up and decayed, head [hand?] not saved" (Edmundson 1942). Although the artifacts recovered by Edmundson have apparently been lost, the cranium is now housed at the Oregon State Museum of Anthropology (OSMA #11-201) and was examined for this study.

EXCAVATIONS IN 1961 AT THE RAYMOND'S DUNE SITE

In 1961 the section of Highway 101 between Brookings and Gold Beach was scheduled for construction (Fig. 1). Concerned that the impending highway construction would destroy the site of *Chetlessenten*, local residents Wilfred and George Wasson and Bill and Ron Crook contacted archaeologist David L. Cole at the University of Oregon. In March 1961 Cole, who identified himself as Field Director in Archaeology, requested permission from the Oregon State Highway Department to excavate at *Chetlessenten*, proposing "to work on this site in mid-June since this time would probably be most favorable, as far as your tentative construction schedule is concerned" (Cole 1961a). The State Highway Engineer replied in a letter to Cole that "there should be no conflict

between your proposed explorations north of Pistol River and our activities if your digging is done this summer" (Williams 1961).

In the meantime, Wilfred Wasson and Bill and Ron Crook began excavating at *Chetlessenten*. Cole and the University of Oregon field crew arrived later and conducted excavations from June 13-18, 1961 at *Chetlessenten*, to which Cole assigned the number 35CU61. Cole and his field crew then worked the rest of the summer in the John Day Reservoir area on the Middle Columbia River. After the University of Oregon field crew left *Chetlessenten*, further excavations were conducted there by local residents, including Wilfred and George Wasson and Ron and Bill Crook. In addition, amateur archaeologist Eugene Heflin began digging at *Chetlessenten*, and it is Heflin's subsequent report that remains the principal source of information on this site (Heflin 1966; also see Erlandson et al. 1997; Moss and Wasson 1998).

In addition to *Chetlessenten*, local residents were aware of the existence of another archaeological site, informally referred to as the "old village," located a short distance to the north in the dunes below Raymond's Lodge. Evidence of prehistoric occupation occurred in the sandy dune deposits, which extended part-way up a bluff that parallels the shoreline. It was understood by local residents that this site was outside the planned right-of-way for Highway 101. Accordingly, archaeological salvage efforts were focused on *Chetlessenten*, where the proposed construction of an access road would destroy a portion of the site.

Unfortunately, during a Sunday outing the highway construction superintendent, while attempting to satisfy his wife's curiosity about possible "finds" of artifacts in the old midden, bulldozed into the dune below Raymond's Lodge. The bulldozer pushed cultural deposits that had built up against the base of the bluff down on to a lower bench. A short time later George Wasson arrived on the scene and observed the disturbed archaeological deposits. He noticed that the shell strata contained a high proportion of dune sand, and that the sediments were blue-gray in color, as if there was a blue clay deposit nearby, in

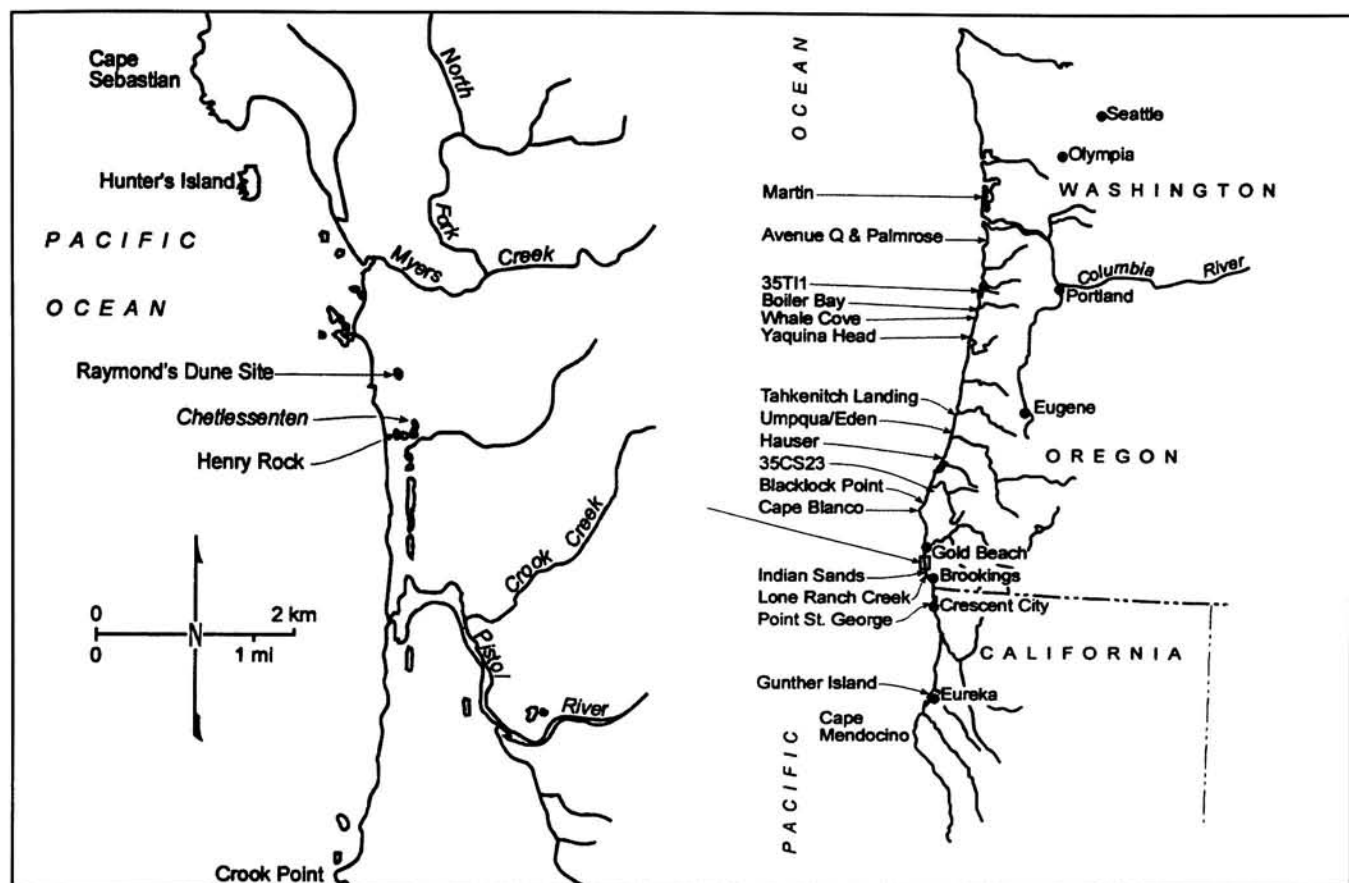


Figure 1. Location of the Raymond's Dune site (35CU62) and *Chetlessenten* (35CU61), as well as other sites mentioned, on the southern Northwest Coast.

contrast to the black cultural deposits at *Chetlessenten*. Wasson collected a number of bones, including some human remains, from the surface of the disturbed deposits.

Upon hearing of the bulldozing, Wilfred Wasson and Ron Crook hurried to the site to assess the situation. In an interview in 1992, Crook recalled seeing an "orange clay house floor with charcoal at the bottom of a bulldozer cut." Crook further mentioned that "the house floor was overlain by a sterile layer of dune sand which in turn was overlain by a shell deposit" (Ron Crook, personal communication, 1992). Crook and Wasson collected a number of artifacts, including some additional human remains, from the surface of the disturbed deposits.

Cole visited this site with Wilfred Wasson on June 18, 1961, and they conducted excavations within the house feature for a few hours. The bulldozing had removed all but one corner of the

house, where the packed clay floor was visible. Cole recorded brief notes about the house floor on a feature form, photographed some charred timbers, and "took carbon samples" for radiocarbon dating (Cole 1961b). The photograph, labeled "house floor w/burned beams," shows a sizable section of charred wood lying horizontally on the house floor.³

Although few architectural details could be obtained, it is noteworthy that Cole believes that this house was different from those at nearby *Chetlessenten*. Specifically, this house lacked evidence of vertical plank walls, which were a characteristic feature of the houses at *Chetlessenten* (David L. Cole, personal communication, 1995). The house floor was destroyed by further bulldozing shortly thereafter. Cole later assigned this site the number 35CU62, but a site record form was not filled out.

LOCATION OF THE RAYMOND'S DUNE SITE

As Cole did not fill out an official site record form, the location of 35CU62 has never been precisely clear. In conversations with the senior author in the early 1980s, Cole mentioned that 35CU62 was north of *Chetlessenten* and close to a creek. The closest named creek north of *Chetlessenten* is Meyers (as spelled by Berreman 1935a:51; 1935b:21) or Myers (as spelled on USGS maps) Creek and, over time, 35CU62 began to be referred to as the Meyers Creek site (Draper 1981:155; Ross 1990:555-556) or Myers Creek site (Pullen 1982:21; Draper 1988:108-109; Moss and Erlandson 1994:100; Tasa 1997:53-55).

In an effort to pin down the location of 35CU62, Ron Crook and the senior author revisited the area in 1992. Using the USGS 7.5' Cape Sebastian quadrangle (provisional edition 1986), Crook placed this site 2.4 km north of the present mouth of Pistol River, approximately 0.4 km north of *Chetlessenten* (Fig. 1). According to Crook, the house floor at 35CU62 was situated at approximately the same elevation as present Highway 101, an estimated 12-15 m below the bluff on which *Chetlessenten* was situated.

It is well known locally that the location of the mouth of Pistol River is different now from where it was at the time of historic contact. As noted by early Curry County pioneer Fred S. Moore:

The Chetl-Essentans had a village near the mouth of the stream known by their tribe name but which we named Pistol River. The course of this river is greatly changed now. You who are familiar with that vicinity know that the river runs straight out, or almost directly into the ocean.

In early days and up to the year of the great flood in 1890, the river swung around a high point north of its present mouth, then ran for half a mile along the foot of a bluff and emptied into the ocean near a large rock opposite the home of George Henry. The Chetl-Essentan village was located on the bluff directly in front of the Henry home (Moore 1927:2-3; also see Heflin 1966:157).

It appears likely, then, that *Chetlessenten* and 35CU62 were both associated with the former outlet of Pistol River. The location of 35CU62 suggests that it may have corresponded to one of the shell mounds north of *Chetlessenten* mentioned by Schumacher (1877a:32-33). Heflin (1966:162) also seemed to refer to 35CU62 when he wrote that "just opposite a large cluster of offshore rocks, about three-quarters of a mile south of Myers Creek and one mile north of Chetleshin, was another settlement. In making a road-cut through the area, house pits and shell middens were revealed, as well as several burials. All were destroyed."

Since 35CU62 was slightly more than a kilometer south of the mouth of Myers Creek, the name "Myers Creek site" does not seem particularly appropriate for this locality.⁴ Instead, in view of its location and setting, "Raymond's Dune" is proposed here as a more accurate name for the site recorded as 35CU62.

ARTIFACTS FROM THE RAYMOND'S DUNE SITE

According to Crook, Cole was impressed by the projectile points that had been collected from 35CU62, suspecting that they represented an early style. George Wasson donated three artifacts (one projectile point, one knife/biface, one point tip fragment) that are in the collections of the Museum of Anthropology at the University of Oregon.⁵ Ron Crook loaned his collection from 35CU62 to the Museum. Cole photographed 19 items on loan from Crook and made notes on the 12 most distinctive specimens.

Crook's collection includes five projectile points, one point tip, three knives/bifaces, two scrapers, one knife/graver, one drill, and four biface fragments (the other two items shown in the photographs are not clearly identifiable as artifacts). Illustrations (redrawn from photographs) of the 12 most distinctive artifacts, including the two complete artifacts donated by George Wasson, appear in Figure 2. Metric attributes (apparently recorded by Cole) for these illustrated artifacts are provided in Table 1.

Based on the collections made by Edmundson, Wasson, and Crook, the projectile points from the Raymond's Dune site consist for the most part of foliates (both serrated and unserrated) and large shouldered points with contracting stems. The latter are often referred to in this region as Coquille Series points (Connolly 1986). A few small narrow-necked points are also represented (Fig. 2, d-f). Foliates and Coquille Series points are associated with older sites (e.g., the Glade Tradition) that antedate the emergence of late prehistoric cultures (e.g., the Siskiyou and Gunther patterns) in southwest Oregon and northern California (Connolly 1986; 1988).

HUMAN SKELETAL REMAINS FROM THE RAYMOND'S DUNE SITE

Fragmentary human remains from the Raymond's Dune site include remains from one individual collected by Edmundson (OSMA #11-201) and remains representing three individuals collected by George and Wilfred Wasson (WAS-1, WAS-2a, WAS-2b) (Tasa 1997).

OSMA #11-201

These remains were identified as those of a subadult male, aged 12 to 15 years old at death, and include a complete mandible and nearly complete cranium, minus small portions of the occipital, right and left temporal and zygomatic bones, and sphenoid. The upper left central incisor is incompletely erupted and exhibits no occlusal wear. No cranial pathologies were observed.

WAS-1

These remains represent those of a male aged 35-45 years at death and include a fragmentary cranium, a complete mandible, a right femoral shaft, a left distal femur, a right distal humerus, atlas and axis fragments, a number of unidentifiable vertebral fragments, a rib fragment, and a left clavicle fragment. Noted pathologies on the skeleton and dentition include hypoplastic defects on the lower canines and an abscess associated with the upper left lateral incisor.

WAS-2a

These remains represent those of a 35-40 year old male and include a near complete post-crania and a lower left third molar. Periostitis was noted throughout much of the post-cranial skeleton.

WAS-2b

These remains were found commingled with WAS-2a but are of an additional individual. They represent the remains of an adult of indeterminate sex and include five metacarpals.

RADIOCARBON ASSAY

Ron Crook's artifact collection was returned to him in May 1962, at which time Cole commented that "we are going to try to get C-14 dates on timbers from the house from which the points came" (Cole 1962). In part due to lack of funds, however, no action was taken on submitting samples for radiocarbon dating for almost five years. According to Crook, during this interval he and Wilfred Wasson continued to urge that charcoal samples from the house floor be submitted for radiocarbon dating, but Luther S. Cressman, the principal archaeologist at the University of Oregon, was not interested because his previous experiences had led him to believe that nothing very ancient would be found on the coast (Ron Crook, personal communication, 1992). Cole eventually submitted a sample of the charred timbers from 35CU62 for radiocarbon dating in 1967.⁶ This sample, which weighed 7.3 g, was processed at Gakushuin University in Japan and, as previously noted, produced a radiocarbon assay of $3,000 \pm 90$ B.P. (GaK-1317).⁷

The radiocarbon date from 35CU62 first appeared in the archaeological literature in Cressman's 1977 book *Prehistory of the Far West*, where it was stated that:

Site CU-62, close to CU-61, throws light both on the antiquity of coastal settlement and the adaptive process. CU-62 is the remains of a structure (house?) nearly destroyed during highway construction. A partially burned beam is dated at 3000 ± 90 B.P. (GAK-1317); this

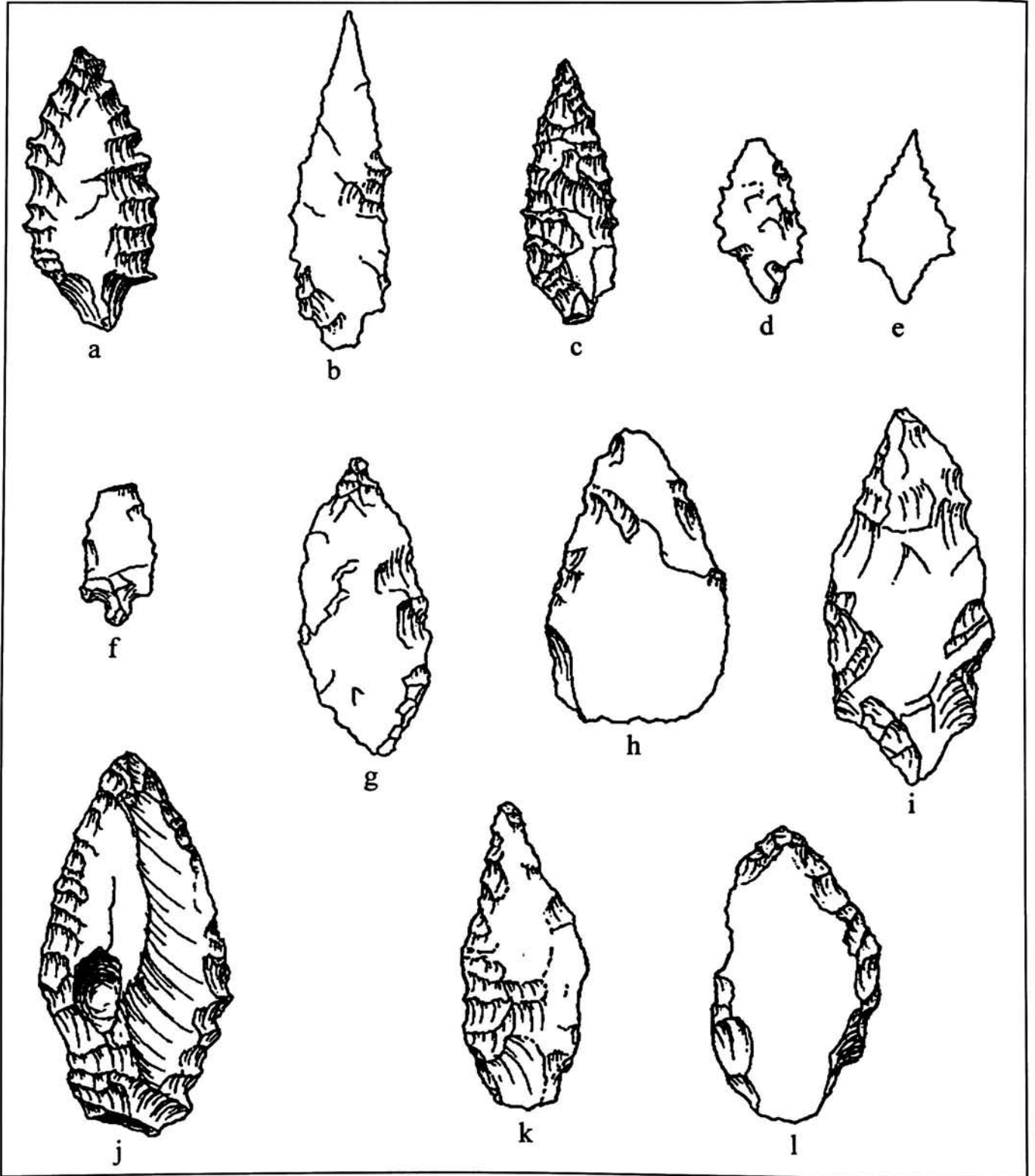


Figure 2. Artifacts from the Raymond's Dune site (35CU62): a-f, projectile points; g-j, knives/bifaces; k, knife/graver; l, spall scraper. Shown actual size. (Specimens a and j were donated by George Wasson to the Museum of Anthropology at the University of Oregon; the rest of the specimens remain in the possession of Ron Crook.)

Table 1
METRIC ATTRIBUTES OF SELECTED STONE TOOLS FROM 35CU62

Figure 2	Class	<u>Measurements (mm)</u>			Material	Comments
		Length	Width	Thickness		
a	Projectile Point	43.2	19.9	5.6	chert	impact fracture on tip
b	Projectile Point	63.0	18.0	7.0	chert	
c	Projectile Point	49.0	27.0	7.5	chert	
d	Projectile Point	33.0*	17.0	6.0	jasper	broken tip
e	Projectile Point	33.0	19.0	5.5	chert	
f	Projectile Point	30.0*	8.5	5.0	chert	broken tip
g	Knife/Biface	55.0	24.0	10.0	chert	
h	Knife/Biface	70.0	32.0	10.0	chert	
i	Knife/Biface	58.3	27.8	11.2	chert	
j	Knife/Biface	54.0	32.0	10.0	chert	
k	Knife/Craver	59.0	23.0	13.0	basalt	
l	Spall Scraper	54.0	30.0	10.0	quartzite	

* = estimated measurement

is the earliest date for the long stretch of coast from Northern California (San Francisco Bay) to western Washington. The only artifacts recovered are large, heavy points with edge projections suggesting serration. Berreman has reported finding the same kind of points at Whale Head Cove a short distance away (Cressman 1977:194).

The early radiocarbon date from 35CU62 has subsequently been listed in numerous reports and publications on Oregon coast archaeology (e.g., Draper 1981:155; 1988:108-109; Pullen 1982:23-24; Minor and Toepel 1983:229; Minor 1986:104; Ross 1990:556; Lyman 1991:31; Moss and Erlandson 1994:45; Tasa 1997:55). This date was mistakenly listed as "about 3000 B.C." in *The Natural World of the California Indians* by Heizer and Elsasser (1980:177).

HISTORICAL CONTEXT

Although radiocarbon dating became available to archaeologists during the 1950s, at the time of the 1961 fieldwork at *Chetlesenten* and 35CU62 radiocarbon dates had been obtained from only three sites on the entire southern Northwest Coast. The first radiocarbon date reported from this region was obtained from 35CS23 near the head of tidewater on the Coquille River on the southern Oregon coast. Brief test excavations at this site by Cressman in 1952 exposed an 80 cm-thick midden composed primarily of freshwater mussel shells at a depth of 2.5 m below the ground surface. Surmising from the geological context that the midden formed "at the time when the velocity of the Coquille River decreased, perhaps owing to relative rise of sea level" (Olson and Broecker 1959:14), Cressman (1952:258-259) suggested that the site might be as much as 3,000 to 5,000

years old (cf. Cressman 1953:297-298). Associated charcoal, however, produced a radiocarbon date of 350 ± 150 B.P. (Olson and Broecker 1959:14).⁹

Cressman subsequently submitted wood and charcoal samples for radiocarbon dating that had been recovered in 1957 and 1958 from 35TI1 at Netarts Bay on the northern Oregon coast. This site, a Tillamook village where occupation spanned the late prehistoric and early historic periods, was reported in the first Ph.D. dissertation in Anthropology at the University of Oregon prepared by Thomas M. Newman (1959). Three radiocarbon dates of 150 ± 150 B.P., 280 ± 150 B.P., and 550 ± 150 B.P. were reported from 35TI1 (Crane and Griffin 1960:42). In a "Prefatory Note" to an edition of Newman's dissertation revised for distribution to the anthropological community, Cressman wrote that "one of the rather surprising results of the study is the indication of the relatively late date of occupation of the Oregon coast."

As a result of these experiences with radiocarbon dating, Cressman apparently was not optimistic about the possibility of discovering evidence of early occupation on the southern Northwest Coast. Cressman attributed the lack of time depth for coastal occupation in this region to environmental processes, as in *Prehistory of the Far West* he wrote: "The lack of evidence of occupation as much as 1,000 years ago, a condition seeming to controvert the inference of early occupation, is explained by the hypothesis that the rising sea level has inundated the earlier sites" (Cressman 1977:194). In fact, however, the potential for discovering evidence of coastal occupation with an age of that magnitude had already been realized with the reporting in 1961 of a radiocarbon date of $1,050 \pm 200$ B.P. derived from charcoal recovered from the base of the Gunther Island Shell Mound on Humboldt Bay in northern California (Crane and Griffin 1961:119).¹⁰

An even earlier radiocarbon date pertaining to prehistoric occupation in this region, also not referenced in *Prehistory of the Far West*, was obtained in 1970 from Point St. George on the northern California coast (Buckley and Willis

1970:116; Gould 1972). A radiocarbon assay of $2,260 \pm 210$ B.P. was produced by charcoal associated with the earlier of the two occupations represented there, which consisted for the most part of a flint-chipping workshop (Gould 1966:87). Cultural materials associated with the Point St. George I occupation were largely limited to stone tools and debitage. The artifact assemblage consisted primarily of bifacial tools (most of which appear to have been knives or bifaces), as well as projectile points assigned to two "shape traditions" referred to as "round base" and "pointed stem" (Gould 1966:51-52).

The small artifact assemblage available from 35CU62, located approximately 65 km north of Point St. George, is generally comparable to that from Point St. George I. In particular, the occurrence of projectile points with pointed stems at both sites suggests that this was a widespread point style along the northern California-southern Oregon coast circa 2,000-3,000 years ago. It is noteworthy that large points with round bases and pointed stems were also found at *Chetlessenten* (Heflin 1966:184, Plate 1), indicating that an earlier component comparable to Point St. George I and 35CU62 was represented below the protohistoric occupation there (cf. Erlandson et al. 1997:235-237).

In the passage about 35CU62 in *Prehistory of the Far West* quoted above, Cressman made reference to projectile points similar to those found at 35CU62 also having been collected by Berreman "at Whale Head Cove a short distance away." Berreman did not use the term "Whale Head Cove," but he did record two archaeological sites at the mouth of Whalehead Creek, Site 35 (35CU35) on the north side and Site 36 (35CU36) on the south side (Berreman 1935a:55-56). Berreman assembled a small collection of 14 artifacts from 35CU35, but these include only one projectile point (described as "leaf shaped"), and he does not mention collecting any artifacts from 35CU36.

In view of Cressman's (1977:194) reference to Berreman recovering "large, heavy points" (plural) from "Whale Head Cove," and considering the fact that only one projectile point

is included in Berreman's collection from 35CU35, it seems likely that Cressman actually meant to refer to Berreman's collection from Site 34 (35CU34) at the south end of Indian Sands, approximately "one mile north of the mouth of Whalehead Creek" (Berreman 1935a:54). Berreman collected 208 artifacts at Indian Sands, where most of the cultural deposits had been severely deflated by coastal winds. Thirty-two of the 35 classifiable projectile points in his collection are large foliates (20 serrated, eight unserrated, and four reworked). Most of these specimens would be assigned to either the "round base" or "pointed stem" traditions recognized by Gould (1966:51-52), and therefore would easily fit in with the projectile points from Point St. George I and 35CU62 (Minor and Greenspan 1991:28-31).

Although numerous sites along the Pacific coast of southern Washington, Oregon, and northern California were investigated during the 1970s and early 1980s, none produced radiocarbon dates older than the "3,000 year barrier" established by 35CU62.¹¹ It seemed for a long time, then, that evidence of occupation earlier than circa 3,000 B.P. was unlikely to be found in this region. With its radiocarbon date of $3,000 \pm 90$ B.P., 35CU62 remained the oldest site reported on the southern Northwest Coast until the mid-1980s, when earlier dates of $5,100 \pm 70$ B.P., $6,880 \pm 80$ B.P., and $7,960 \pm 90$ B.P. were obtained from Tahkenitch Landing (35DO130) on the central Oregon coast (Minor and Toepel 1986). Currently, the earliest radiocarbon dates from the southern Northwest Coast are assays of $7,790 \pm 70$ B.P., $8,150 \pm 120$ B.P., and $8,250 \pm 80$ B.P. from a deflated shell scatter (35CU67) at the north end of Indian Sands (Moss and Erlandson 1994:103; 1995:15; 1996).

At the present time, at least thirteen sites along the Oregon coast have produced accepted radiocarbon assays dating to circa 3,000 B.P. or earlier (Table 2).¹² In comparison, the archaeological record elsewhere along the southern Northwest Coast continues to be characterized by limited time depth. The earliest archaeological radiocarbon date from the

southern Washington coast is $2,140 \pm 60$ B.P. from 45PC101 on Willapa Bay (DePuydt 1994:71). The date of $2,260 \pm 210$ B.P. from Point St. George remains the earliest radiocarbon assay from an archaeological site on the California coast north of Cape Mendocino (Gould 1972).

Although long since surpassed as the earliest archaeological radiocarbon date from the southern Northwest Coast, the assay of $3,000 \pm 90$ B.P. from 35CU62 remains noteworthy as among the earliest associated with house remains. Cole's observation that the house at 35CU62 was different from the rectangular plank houses at nearby *Chetlessenten* is significant, as it suggests that this feature was representative of an earlier house style.¹³ A similar situation was described by Berreman at the Lone Ranch Creek Shell Mound in the territory of the Athapaskan Chetco approximately 20 km south of Pistol River. The houses encountered in the upper two to three feet of the cultural deposits at Lone Ranch Creek were rectangular plank structures similar to those at *Chetlessenten*. The deepest house encountered, situated eight feet below surface and within six inches of the bottom of the cultural deposits, was different. Unlike the others, House No. 4 "lacked any plank divider between the floor levels" and instead featured a floor that "sloped from a depth of 7 feet below datum point at the sides of the house to 8 feet at the center" (Berreman (1944:23). It was suggested that House No. 4 "represents an early period of occupancy and was probably built when the mound was not more than a third of its present height at that point" (Berreman 1944:23).

The house at 35CU62 remained the earliest radiocarbon dated domestic structure identified on the southern Northwest Coast until 1987, when a comparable radiocarbon date of $3,110 \pm 100$ B.P. (overlapping at one standard deviation) was reported from a house feature at Yaquina Head on the north-central Oregon coast (Minor et al. 1987:34-36). This radiocarbon date was derived from charcoal associated with a concentration of fire-cracked rock and large mammal bone found on the

Table 2

**ARCHAEOLOGICAL SITES ON THE SOUTHERN NORTHWEST COAST
WITH ACCEPTED RADIOCARBON DATES OF CIRCA 3000 B.P. AND EARLIER**

Site Number	Site Name	Reference
35CLT13	Avenue Q	Connolly 1992
35CLT47	Palmrose	Connolly 1992
35LNC45	Boiler Bay	Tasa and Connolly 1995
35LNC60	Whale Cove	Bennett and Lyman 1991
35LNC62	Yaquina Head	Minor et al. 1987; Minor 1991
35LA3	Neptune	Tasa and Connolly 2001
35DO130	Tahkenitch Landing	Minor and Toepel 1986
35DO83	Umpqua/Eden	Ross and Snyder 1986
35CS114	Hauser	Minor and Greenspan 1998a
35CU75	Blacklock Point	Minor 1993
35CU82	Cape Bianco Lithic Site	Minor and Greenspan 1991
35CU62	Raymond's Dune	Cressman 1977:194; this volume
35CU67C	Indian Sands	Moss and Erlandson 1994, 1996

floor of a pithouse exposed in the eroding cliff face. The radiocarbon dates from 35CU62 and Yaquina Head are the earliest so far reported in association with domestic structures on the southern Northwest Coast, and suggest that sedentary lifeways were established in different areas of this region by circa 3,000 B.P.

Although information about the early houses at 35CU62, Lone Ranch Creek, and Yaquina Head is limited, it is likely considering their relative antiquity that these features represent examples of domestic structures built by Archaic peoples. The houses at these sites were probably similar to two domestic structures uncovered at the Umpqua/Eden site on the central Oregon coast, which were small curvilinear pithouses measuring 3 by 4 m and 2.5 by 3 m (Lyman 1991:105, 125). A radiocarbon date of 620 ± 55 B.P. was associated with the smaller of these two structures (Lyman 1991:127). The profile of an apparently similar pithouse was exposed during excavations at the Cape Creek Shell

Midden on the central Oregon coast. Charcoal from a hearth associated with this house floor produced a radiocarbon date of 810 ± 60 B.P. (Minor and Greenspan 1995:29-31, 38, 128).

Archaic-style pithouses were later replaced by the rectangular plank houses made by the Formative-level ethnographic peoples of the southern Northwest Coast. This change in house styles did not occur at the same time throughout the region. Temporal and geographic patterns in the distribution of rectangular plank houses indicate that Formative cultures first emerged around 2000 years ago in the Lower Columbia River region (including the adjacent northern Oregon coast). The presence of small pithouses at the Umpqua/Eden and Cape Creek sites is interpreted to reflect the late persistence of Archaic lifeways on the central Oregon coast. Current evidence suggests that Formative cultures did not appear along the southernmost portions of the southern Northwest Coast until fairly late in prehistory (Minor and Greenspan 1995:135-141; 1998b).

CONCLUDING REMARKS

In retrospect, it seems likely that there may have been some reluctance on the part of Cole and Cressman to accept that the radiocarbon assay of $3,000 \pm 90$ B.P. accurately reflected the age of the house at the Raymond's Dune site because it was so much older than radiocarbon dates obtained from other prehistoric sites on the southern Northwest Coast. Current information indicates, however, that the early radiocarbon date from this site is entirely consistent with the styles of projectile points associated as well as the presence of an earlier house style at the site. When placed in its historical context, there does not seem to be any reason to question the validity of the radiocarbon date from the Raymond's Dune site.

While incompletely reported until now, the radiocarbon date of $3,000 \pm 90$ B.P. from the Raymond's Dune site was a benchmark in archaeological research on the southern Northwest Coast. As recently as the mid-1980s, most of the investigated archaeological sites had been dated to the late prehistoric and early historic periods. The apparently limited time depth for prehistoric occupation led to speculation that the southern Northwest Coast may have been among the last sections of the Pacific coast to be settled (e.g., Gould 1966:87-88; 1972:43) or was only sparsely populated until late in prehistory (Hildebrandt 1981:191). The early radiocarbon date from the Raymond's Dune site indicated that there was some hope of discovering evidence of earlier prehistoric occupation, a prospect that has been realized during subsequent archaeological research along the Oregon Coast.

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NOTES

1. The senior author's reason for writing this article is based in large part on the fact that in previous writings about 35CU62 he has inadvertently introduced some errors into the archaeological literature regarding this site. This article represents an attempt to set the record straight.

2. Dr. W.T. Edmundson was "a medical doctor of Newberg" in Yamhill County, Oregon, who is also known to have excavated in prehistoric mounds along the Yamhill River (Laughlin 1943:220).

3. The negative and photograph of the house feature at 35CU62, on file at the Museum of Anthropology, University of Oregon, are considered too overexposed to warrant inclusion in this article.

4. In 1935 Berreman (1935a:51) recorded a "small shell deposit on the north bank of Meyer's Creek just where it opens onto the beach about 8 feet above present water level" as Site 29. He added that this site was "30 feet in diameter, [and that it] may have been partly washed away" (Berreman 1935a:51). In the field notes from his survey, however, Berreman (1935b:21) indicated that this site was on the south side of Meyer's Creek. Subsequent efforts to locate a site in the vicinity of the mouth of Meyers Creek have not been successful (Minor 1986:104; Moss and Erlandson 1994:45).

5. Photographs of the two complete specimens were included in an earlier article about southern Oregon coast prehistory (Minor and Toepel 1983:242, Figure 16.2, n-o).

6. The charcoal sample from 35CU62 was submitted for radiocarbon analysis to Gakushuin University in Japan along with samples from sites

University of Oregon archaeologists were investigating on the Middle Columbia River. Funds to pay for the radiocarbon analyses came from the John Day Reservoir project sponsored by the National Park Service (David L. Cole, personal communication, 1995).

7. Calibration of the radiocarbon date of $3,000 \pm 90$ B.P. from 35CU62 using the CALIB 3.0.3 program (Stuiver and Reimer 1993) yields calibrated ages of 3,205, 3,187, and 3,169 cal B.P. Because radiocarbon date calibration programs are being refined on a regular basis, and because doing so does not affect the content of this article, all dates mentioned here are listed in their uncorrected form. Readers may correct these dates using the calibration program of their choice at any point in the future.

8. Cressman (1977:195) noted parenthetically that "I am indebted to Mr. D.L. Cole for the unpublished information on CU-62."

9. Olson and Broecker (1959:14) added that "because of the unexpectedly young sample age, additional charcoal (L-388A) from the same site was dated following treatment for humic-acid removal, and essentially the same age was obtained."

10. The approximate age of the initial occupation of the Gunther Island Shell Mound was confirmed in 1969 with the acquisition of a second radiocarbon date of $1,070 \pm 100$ B.P. derived from "charcoal from fire pit" situated in the "Ist discernible occupation strata" in this site (Buckley and Willis 1969:75).

11. In 1979 a radiocarbon date of 1,010 B.C. was reported in a paper presented about the Umpqua/Eden site on the central Oregon coast (Ross and Snyder 1979). This date was apparently converted to B.C. by subtracting 1950 from a radiocarbon assay of $2,960 \pm 45$ B.P., which was more formally reported in 1986 (Ross and Snyder 1986:83). This radiocarbon date, the earliest obtained from Umpqua/Eden, is statistically identical to the early radiocarbon date from 35CU62.

12. Approximately 50 uncorrected radio-carbon assays dating to circa 3,000 B.P. or earlier have been reported from the thirteen sites listed in Table 2. It does not seem necessary to list them all here; interested readers may consult the references provided.

13. The age of one of the rectangular plank houses at *Chetlessenten* has recently been established as a result of a study by Erlandson et al. (1997). Charred wood from a house excavated by the University of Oregon field crew in 1961 produced radiocarbon dates of 260 ± 60 B.P. and 280 ± 50 B.P. Two large shell fragments recovered in 1961 produced radiocarbon dates of 440 ± 70 B.P. and 490 ± 60 B.P. One more radiocarbon date of 530 + B.P. was obtained from a shell fragment recently collected from remnant midden deposits in the southern site area (Erlandson et al. 1997:235-237).

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