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## APPENDIX H

# Río Amatzinac Survey: Site Descriptions

KENNETH G. HIRTH

This appendix provides detailed descriptions of the Formative period sites located during the Río Amatzinac Survey (Chapter 21). The sites are presented in numerical order according to the site numbers assigned by the survey. Each description includes the following information: RAS site number, site name (where applicable), exact location using latitude and longitude, location with respect to modern towns and roads, natural setting, modern utilization, and prehispanic occupation. For the Early, Middle, and Late Formative, archaeological remains are described and a settlement classification is given for the site (Table 21.3). Post-Late Formative components are briefly mentioned. Sites located in the survey which lack any Formative occupation are not included in this appendix. Analyses of these later periods are provided elsewhere (Hirth 1974; 1980).

### **RAS-1 (Tetla)**

Latitude: 18° 40' 33.4"

Longitude: 98° 45' 41.75"

Location: Southeast of the village of Chalcatzingo, on the lower slopes of the north and east sides of the Cerro Delgado, between the *cerro* and the *barranca* of the Río Amatzinac.

Natural setting: The site lies in the High Hills topographic zone. The vegetation zone is a mix of *Pithecellobium* Woodland, *Barranca*, and Interior Valley *Cerros* plant types. Due to erosion the soil on the hillslope areas of Tetla is shallow, but it increases to several meters of depth on the flat land below the slopes.

Based on evidence of occupation clustering, Tetla has been divided into three subareas: RAS-1A along the north of the hill, RAS-1B at the far south of the zone, and RAS-1C, the central area of the zone.

Modern utilization: The talus slopes are used for grazing, while the lower portion of the site is terraced and planted in

maize during the rainy season. All cultivation is with teams of oxen.

*Middle Formative Occupation:* Archaeological remains: Middle Formative ceramics were recovered from the surface of some RAS-1A terraces, indicating that these terraces are probably contemporaneous with terracing on the main site zone of Chalcatzingo. Late Classic and Early and Middle Postclassic ceramics are found across these terraces as well. Middle Formative sherds were also recovered at the south end of Tetla, RAS-1B. At both RAS-1A and -1B the Cantera phase materials are twice as abundant as those of the Barranca phase.

Classification: Two Barranca phase Hamlets, two Cantera phase Hamlets.

*Late Formative Occupation:* Archaeological remains: Late Formative material is lightly distributed across a 4 ha area of RAS-1C. The site has been heavily disturbed by heavy occupation during the Postclassic, and field clearing has swept most of the fields clean of rubble from civic or residential architecture.

Classification: Hamlet.

*Other Occupations:* Terminal Formative Hamlet, Early Classic Small Village, Late Classic Large Village (Hirth 1980); Early Postclassic Small Village.

### **RAS-5**

Latitude: 18° 41' 51.77"

Longitude: 98° 46' 8.35"

Location: Just south of the Cuautla-Izúcar highway, north-northeast of the present village of Chalcatzingo.

Natural setting: The site is 355 m east of the Río Amatzinac between the 1,350–1,400 m contour intervals. The topographical zone is Flat Plains, and the vegetation zone is Huizache Grassland. The soil appears shallow but is high in humus. An impermanent drainage lies 125 m to the east.

Modern utilization: The area was fallow when surveyed and had not been

planted for several years. Nopal cacti grow on top of the mounds at the site and are collected by farmers from Jantetelco. *Middle Formative Occupation:* Archaeological remains: Only a few Barranca phase sherds were located. Surface concentrations of material were extremely low, since the site had not been plowed for a number of years. Architecture at this site is from later periods, principally Postclassic.

Classification: Barranca phase Isolated Residence.

*Other Occupations:* Classic Isolated Residence (Hirth 1980), Early Postclassic Isolated Residence, Late Postclassic Small Village.

### **RAS-13**

Latitude: 18° 41' 45.09"

Longitude: 98° 45' 3.34"

Location: Northeast of the village of Chalcatzingo and southeast of the village of Jantetelco, north of the Cuautla-Izúcar highway.

Natural setting: The site lies at the base of the Cerro Jantetelco at the 1,400 m contour interval. The topographic zone is Low Mountains, and the vegetation zones are Interior Valley *Cerros* and Huizache Grassland. The closest permanent water source is the Barranca de los Santos 865 m to the east. The soil is shallow and seems very poor for agriculture. Rock rubble is quite abundant.

Modern utilization: Rainfall agriculture of maize covers about 40 percent of the site area. A hacienda period irrigation system running east to west passes just south of the site.

*Middle Formative Occupation:* Archaeological remains: This site is a simple ceramic dispersion with some associated architectural features. A probable Middle Formative water diversion system was noted which seems to be aimed at diverting slope runoff away from the major area of habitation. Our surface col-

lections were extremely poor, and for the Formative period only Cantera phase artifacts were recovered.

Two low mounds of a probable ball court occurred at the site. These mounds are extremely destroyed due to recent plowing. Each mound is ca.  $15 \times 5 \times 1$  m in size. Judging from the architecture, the ball court is probably Late Postclassic.

**Classification:** Cantera phase Isolated Residence. Although the site may have been larger, our surface collections did not allow us to determine this.

**Other Occupation:** Late Postclassic Hamlet.

#### **RAS-14 (Las Pilas)**

Latitude:  $18^{\circ} 41' 16.7''$

Longitude:  $98^{\circ} 47' 56.78''$

**Location:** Within the grounds of the swimming spa Las Pilas in the northern part of the town of Jonacatepec.

**Natural setting:** The site is located at a spring between the 1,350 and 1,400 m contour intervals. The topographical zone is Flat Plains, and the vegetation zone is Pithecellobium Woodland. The site is 1,485 m east of the Río Frío. An impermanent *barranquilla* runs along the eastern edge of the site, and the Río Amatzinac lies 3.6 km to the east. The soil is of variable depth in this area, ranging from 2.5 m around the spring to 1.5 m east of the site.

**Modern utilization:** The main site area is surrounded by a modern swimming spa. Outlying portions of the site on the north and east sides are under cultivation. The area is irrigated, and corn, beans, squash, and tomatoes are grown. **Early Formative Occupation:** Archaeological remains: No Amate phase debris was found on the surface, but some was recovered in two test pits during July 1973 by excavators from the Centro Regional de Morelos y Guerrero, INAH, and the Universidad de las Américas.

**Classification:** Hamlet.

**Middle Formative Occupation:** Archaeological remains: The heaviest concentrations of material are in the area of the spring. Cantera phase diagnostics predominate. Middle Formative artifacts were found to the west, southwest, and south of the present swimming pools. The INAH excavations west of the swimming spa encountered Middle Formative material in a mixed stratigraphic content, including both Barranca and Cantera phase materials. A Cantera phase double-loop handle censer was found as an in situ offering against the base of a

small platform structure. Superimposed directly over the top of this platform was a small Classic platform mound.

**Classification:** Barranca phase Hamlet, Cantera phase Small Village.

**Late Formative Occupation:** Archaeological remains: Late Formative debris was fairly light, although marked build-ups were noted which looked like in situ residence areas. Late Formative materials were also recovered in one test pit from the 1973 excavations. Materials from this pit as well as from Chalcatzingo were important for the identification of key diagnostics used in phasing Late Formative settlement materials.

**Classification:** Small Village.

**Other Occupations:** Terminal Formative Small Village, Early Classic Small Village, Late Classic Large Village (Hirth 1980), Early Postclassic Hamlet, Late Postclassic Hamlet.

#### **RAS-15**

Latitude:  $18^{\circ} 41' 50.1''$

Longitude:  $98^{\circ} 47' 51.77''$

**Location:** Due north of Jonacatepec along the Chalcatzingo access road.

**Natural setting:** The site is located just below the 1,400 m contour interval in the Flat Plains topographical zone 1.8 km east of the Río Frío. The vegetation zone is Pithecellobium Woodland.

**Modern utilization:** Rainfall maize agriculture with oxen plowing.

**Middle Formative Occupation:** Archaeological remains: A simple ceramic dispersion covered 0.25 ha. The materials belong to the Cantera phase.

**Classification:** Cantera phase Isolated Residence.

**Other Occupation:** Late Postclassic Isolated Residence (Hirth 1980).

#### **RAS-16**

Latitude:  $18^{\circ} 41' 6.68''$

Longitude:  $98^{\circ} 48' 51.77''$

**Location:** South of the town San Gabriel Amacuitlapilco.

**Natural setting:** This site is in the Flat Plains topographic zone on the 1,425 m contour interval. Principal resources which would have been available would have been from the Pithecellobium Woodland. The soil is less than 1 m in thickness, and there is a high concentration of rock rubble in the fields.

**Modern utilization:** The area is irrigated and under constant cultivation. Field preparation is by oxen. The crops growing at the time of the survey included

maize, beans, squash, peanuts, and tomatoes.

**Late Formative Occupation:** Archaeological remains: Late Formative materials are very lightly scattered over less than 0.5 ha mixed in with Postclassic materials. No clear indications of permanent settlement were evident other than a fairly complete range of utilitarian ceramics.

**Classification:** Isolated Residence.

**Other Occupations:** Early Postclassic Isolated Residence, Late Postclassic Isolated Residence.

#### **RAS-18**

Latitude:  $18^{\circ} 41' 15.03''$

Longitude:  $98^{\circ} 48' 55.11''$

**Location:** Along the 1,425 m contour interval due south of San Gabriel Amacuitlapilco.

**Natural setting:** The site is in the Pithecellobium Woodland vegetation zone and the Flat Plains topographic zone. The soil is very shallow, not exceeding 50 cm. The Río Frío-Tepalcingo is less than 500 m to the west.

**Modern utilization:** This area is cultivated during the rainy season, and the fields are prepared using oxen. Crops include maize, beans, and squash. A small section of the site was uncultivated and used for grazing at the time of the survey. **Late Formative Occupation:** Archaeological remains: A light trace of Late Formative material was discovered. There was no evidence of previous architecture.

**Classification:** Isolated Residence.

**Other Occupation:** Late Postclassic Isolated Residence.

#### **RAS-19**

Latitude:  $18^{\circ} 42' 0''$

Longitude:  $98^{\circ} 48' 23.38''$

**Location:** In the irrigated fields north-east of San Gabriel Amacuitlapilco.

**Natural setting:** This site is in the Pithecellobium Woodland vegetation zone along the 1,400 m contour interval. It is in the north Flat Plains topographic zone 650 m east of the Río Frío.

**Modern utilization:** Principal crops include maize and peanuts. Terraces are evident but appear to be modern. Field preparation is with teams of oxen.

**Late Formative Occupation:** Archaeological remains: Occupation debris is scattered over 1 ha. The fields have been cleared of a substantial amount of rubble. Two low platforms can still be seen, although they appear to date from the Postclassic. A Late Formative phase oc-

cupation is indicated by marked build-ups of ceramics and chipped and ground stone artifacts.

Classification: Hamlet.

*Other Occupation:* Late Postclassic Hamlet.

**RAS-20 (*Campana de Oro*)**

Latitude: 18° 42' 41.75"

Longitude: 98° 48' 8.35"

Location: Directly north of San Gabriel Amacuitlapilco.

Natural setting: This site is on the east bank of the Río Frío, at the 1,400 m contour interval. Springs can be found in the barranca below the site. The vegetation community is the *Pithecellobium* Woodland directly adjacent to the Barranca zone. The topographic zone is Flat Plains.

Modern utilization: Rainfall cultivation of corn, beans, squash, and peanuts is practiced. The ground is prepared for cultivation by both oxen and tractor plowing. Terraces were noted on the west side of the Río Frío. What appear to be a hacienda period drainage system, modern dam, and reservoir are located in the adjacent barranca.

*Early Formative Occupation:* Archaeological remains: Amate phase material was located in two areas of the site. Several sherds and Type D figurine heads were found on the south end of the site, and a thin scatter was found on the north end. A few other sherds were collected from a looter's pit in one of the mounds.

Classification: Hamlet.

*Middle Formative Occupation:* Archaeological remains: For this time period there is a fairly heavy ceramic dispersion within an architectural complex. The exact nature of the Middle Formative debris is difficult to determine because of the heavy Late/Terminal Formative and Early/Middle Postclassic occupations. One or perhaps two Middle Formative platform structures existed at the site. One of these was in the process of being removed so that the field could be plowed with a tractor. The fill of the other could be sampled from a looter's pit on the northeast side. Both the fill and debris from the top of the mound were Cantera phase. It is possible that two separate communities existed, with moderate to light settlement between them. The two highest densities of Middle Formative material are on the southwest side of the site by the two mound structures, and on the far east side.

Classification: Barranca phase Small Village, Cantera phase Large Village.

*Late Formative Occupation:* Archaeological remains: At least five mounds date to this period based on the clustering of associated debris, but it is hard to date them on surface remains alone. The heaviest concentrations of material were not in the mound area but on the north and northeast portions of the site. Field clearing in these areas has greatly reduced the amount of clustered residential debris visible on the surface, but it was evident that the residential area covered approximately 30 ha. A wide range of activities was evident from the surface collections. One possible chipped stone workshop was located. "Kiln wasters" were found in three separate parts of the site, indicating ceramic manufacture. A large array of plain and decorated ceramic types was located, including a small number of imported decorated wares from the Valley of Mexico and the Puebla-Oaxaca area.

Classification: Regional Center.

*Other Occupations:* Terminal Formative Small Village, Early Classic Small Village, Late Classic Hamlet (Hirth 1980), Early Postclassic Small Village, Late Postclassic Large Village.

**RAS-21**

Latitude: 18° 42' 33.4"

Longitude: 98° 48' 31.73"

Location: West of the Río Frío north of San Gabriel Amacuitlapilco.

Natural setting: The topographic zone is Flat Plains and the vegetation zone is *Pithecellobium* Woodland. Site elevation is 1,400 m. The closest permanent water source is the Río Frío and its spring seepages, 175 m to the east.

Modern utilization: The area is cultivated during the rainy season, using oxen for plowing. Crops include maize and beans.

*Late Formative Occupation:* Archaeological remains: A light scattering of Late Formative material was found. No architectural structures were located although ground and chipped stone lithics were recovered.

Classification: Isolated Residence.

*Other Occupation:* Early Postclassic Isolated Residence.

**RAS-22 (*Amacuitlapilco*)**

Latitude: 18° 41' 46.76"

Longitude: 98° 48' 43.72"

Location: Directly in and under the modern village of San Gabriel Amacuitlapilco.

Natural setting: This site is located at

the 1,400 m contour interval on the Río Frío, directly on an east-west crossing through the barranca. The topographical zone is Flat Plains, and the vegetation zone is *Pithecellobium* Woodland. The site is also within 200 m of both the Barranca and the Huizache Grassland zones.

Modern utilization: Rainfall maize agriculture is practiced in local house plots. Several of the fields to the south of the site are built on terraces.

*Middle Formative Occupation:* Archaeological remains: Middle Formative remains consist of a simple ceramic dispersion northwest of the site's Late Postclassic mounds. Most of the site is undoubtedly covered by the town and only a moderate amount of "backyard" searching was possible. It is estimated that the site extends at least 150–200 m to the east.

Classification: Cantera phase Hamlet.

*Late Formative Occupation:* Archaeological remains: Late Formative materials are distributed over about 5 ha, and there are clear indications of permanent settlement. Several good concentrations of material were found with fire-cracked rock, each with 4–6 ground stone artifacts. Both decorated and plain ceramics were present.

*Other Occupations:* Terminal Formative Hamlet, Early Classic Hamlet, Late Classic Hamlet (Hirth 1980), Early Postclassic Hamlet, Late Postclassic Large Village.

**RAS-25**

Latitude: 18° 42' 30.06"

Longitude: 98° 51' 8.35"

Location: On the slopes of a hill northwest of the town of Tlayca.

Natural setting: The topographic classification is Irregular Plains, Slight Relief, and the vegetation zone is Huizache Grassland. Site elevation is 1,400 m.

Modern utilization: The area is cultivated during the rainy season, maize and sorghum being the principal crops. Field preparation on this sloping area is performed with oxen.

*Late Formative Occupation:* Archaeological remains: A light scatter of domestic ceramics was identified. The area of the site is less than 0.5 ha. No structures or construction debris were associated with this material.

Classification: Isolated Residence.

*Other Occupations:* Classic Isolated Residence (Hirth 1980), Late Postclassic Isolated Residence.

**RAS-31**

Latitude: 18° 40' 15.03"

Longitude: 98° 48' 21.71"

Location: About 3/4 km south of Jonacatepec and 300 m west of the Jonacatepec-Tepalcingo road.

Natural setting: This site lies between the 1,300 and 1,350 m contour intervals, in the Flat Plains topographic zone and the Pithecellobium Woodland vegetation zone. It is 295 m east of a small impermeable drainage and 1 km from permanent water.

Modern utilization: Maize agriculture.

*Middle Formative Occupation:* Archaeological remains: The site is a simple dispersion of residential debris. No structures were found. Middle Formative diagnostics were scarce.

Classification: Cantera phase isolated Residence.

*Late Formative Occupation:* Archaeological remains: A variety of Late Formative material was scattered over 1 ha. One mound structure was found which appears to date to this period. Permanent residence is clearly indicated by the marked concentrations of ceramic, lithic, and construction debris.

Classification: Hamlet.

*Other Occupations:* Early Postclassic Hamlet, Late Postclassic Small Village.

**RAS-34**

Latitude: 18° 42' 41.75"

Longitude: 98° 47' 45.09"

Location: Directly adjacent to the east side of the Axochiapan-Zacualpan highway.

Natural setting: This site is in the Pithecellobium Woodland zone on the 1,400 m contour interval. It is in the Flat Plains topographic zone 880 m east of the Río Frío.

Modern utilization: The area is irrigated and planted year round in maize. Cultivation is with teams of oxen.

*Late Formative Occupation:* Archaeological remains: A light scatter of Late Formative materials was found across 0.75 ha. There are no buildups indicating remaining structures. Ceramic collections include an assortment of plain and decorated wares.

Classification: Isolated Residence.

*Other Occupations:* Terminal Formative Isolated Residence (Hirth 1980), Early Postclassic Hamlet, Late Postclassic Hamlet.

**RAS-35**

Latitude: 18° 42' 51.77"

Longitude: 98° 47' 22.38"

Location: Southwest of Jantetelco along the Cuautla-Izúcar highway.

Natural setting: The site lies in the Pithecellobium Woodland zone, more than 1 km from the nearest permanent water source. The topographic zone is Flat Plains, and elevation is 1,400 m.

Modern utilization: The area is cultivated during the rainy season, and chilies were growing at the time of the survey. Field preparation is with oxen.

*Late Formative Occupation:* Archaeological remains: Late Formative materials are mixed with Late Postclassic materials. There is a light scattering of debris over a little less than 0.5 ha, and there was no evidence of construction.

Classification: Isolated Residence.

*Other Occupation:* Late Postclassic Isolated Residence.

**RAS-36**

Latitude: 18° 42' 59.99"

Longitude: 98° 47' 50.1"

Location: Just south of Amayuca.

Natural setting: The vegetation zone is Pithecellobium Woodland, the topographic zone is Flat Plains, and site elevation is 1,425 m. The Río Frío is 310 m to the west.

Modern utilization: The area is farmed during the rainy season, with use of oxen to prepare the fields. Crops include maize and beans.

*Late Formative Occupation:* Archaeological remains: A light trace of Late Formative materials was found. There was no evidence for architectural structures. The Formative material was mixed with Late Postclassic debris.

Classification: Isolated Residence.

*Other Occupation:* Late Postclassic Hamlet overlaps with the materials from RAS-38.

**RAS-37**

Latitude: 18° 42' 58.78"

Longitude: 98° 47' 35.07"

Location: Just south of the intersection of the Cuautla-Izúcar and Zacualpan-Axochiapan highways.

Natural setting: Located in the Pithecellobium Woodland, the site's topographic classification is Flat Plains. Site elevation is 1,425 m. The Río Frío is the closest permanent water source and is located 685 m to the west.

Modern utilization: Rainfall agriculture is practiced, using teams of oxen to

prepare the field. Crops include maize, beans, and squash.

*Late Formative Occupation:* Archaeological remains: A very light scattering of Late Formative material was found, and there is evidence for small habitation units. This appears to be a single-component site.

Classification: Isolated Residence.

**RAS-44**

Latitude: 18° 43' 5.01"

Longitude: 98° 46' 5.01"

Location: East of Jantetelco.

Natural setting: This site is in the Huizache Grassland vegetation zone. The inhabitants also had access to the Barranca zone, since the west side of the site was directly adjacent to the Río Amatzinac. The topographic zone is Flat Plains, and site elevation is 1,400 m.

Modern utilization: No agricultural activities occur in this area, although in adjacent areas to the east rainfall agriculture is practiced. The land slopes into the barranca at this point.

*Late Formative Occupation:* Archaeological remains: Only Late Formative Plain wares were recovered. There is a light scatter of material, with no clear indications of habitation structures. This appears to be a single-component site.

Classification: Isolated Residence.

**RAS-45**

Latitude: 18° 43' 11.69"

Longitude: 98° 46' 48.43"

Location: In a solitary field due west of Jantetelco's northern *barrio*.

Natural setting: This site lies in the northern Pithecellobium Woodland zone between the 1,450 and 1,400 m contour intervals. The topographic zone is Flat Plains. It is roughly 1 km from the closest permanent water source, the Río Amatzinac. Erosion is slight, as is surface rubble.

Modern utilization: Maize, beans, and squash are grown during the rainy season, with use of oxen for plowing. Irrigation canals pass within 150 m to the west.

*Early Formative Occupation:* Archaeological remains: Only a trace of Amate phase materials were recovered in the surface collections. There were no indications that this was a permanently occupied settlement.

Classification: Isolated Residence.

*Middle Formative Occupation:* Archaeological remains: During the Middle Formative the site is characterized as a

simple ceramic dispersion of low density over an area of 0.45 ha. No structures were noted.

**Classification:** Cantera phase Isolated Residence.

**Other Occupations:** Early Classic Isolated Residence, Late Classic Isolated Residence (Hirth 1980), Early Postclassic Isolated Residence, Late Postclassic Isolated Residence.

#### RAS-46

Latitude: 18° 43' 46.76"

Longitude: 98° 46' 23.38"

**Location:** North of Jantetelco and 455 m from the Río Amatzinac.

**Natural setting:** The topographic zone is Flat Plains, and the vegetation zone is Pithecellobium Woodland. Elevation is 1,450 m.

**Modern utilization:** The area is irrigated and under cultivation, crops including maize, beans, and squash. The field is prepared with teams of oxen.

**Late Formative Occupation:** Archaeological remains: A trace of Late Formative materials was found. Surface remains were obscured by a heavy Postclassic occupation of the site.

**Classification:** Isolated Residence.

**Other Occupations:** Early Classic Hamlet, Late Classic Hamlet (Hirth 1980), Early Postclassic Small Village (Hirth 1977), Late Postclassic Hamlet.

#### RAS-48

Latitude: 18° 43' 25.05"

Longitude: 98° 46' 16.7"

**Location:** 1.5 km due north of the old road to Amilcingo. To the south is the old northern *barrio* of Jantetelco.

**Natural setting:** This site lies between the 1,400 and 1,450 m contour intervals, in the Pithecellobium Woodland vegetation zone. The topographic zone is Flat Plains. The site is just 80 m from the Río Amatzinac, just above the slightly rolling barranca edge. The site's inhabitants would have had easy access to the Barranca vegetation zone.

**Modern utilization:** Rainfall agriculture of maize, beans, squash, and peanuts is practiced on the west side of the site. The land is plowed using oxen.

**Middle Formative Occupation:** Archaeological remains: The site is a simple ceramic dispersion across portions of three fields west of some Late Postclassic mounds. The extent of Middle Formative materials was difficult to ascertain due to associated Late Postclassic debris, but it covered at least 3.3 ha. No architec-

tural features were noted.

**Classification:** Cantera phase Hamlet. **Late Formative Occupation:** Archaeological remains: Late Formative materials are scattered over approximately 9 ha. Concentrations seem light because of the heavy Postclassic occupation debris. A few marked buildups of material were found associated with fire-cracked rock and probable rock construction material. A wide range of both plain and decorated wares were recovered.

**Classification:** Hamlet.

**Other Occupations:** Terminal Formative Hamlet, Early Classic Hamlet, Late Classic Hamlet (Hirth 1980), Early Postclassic Small Village, Late Postclassic Regional Center.

#### RAS-49

Latitude: 18° 44' 6.68"

Longitude: 98° 45' 53.44"

**Location:** In the northern valley, south-east of the town of Huazulco.

**Natural setting:** The site is situated in the Huizache Grassland vegetation zone, about 45 m east of the Río Amatzinac. The topographic zone is Flat Plains, and the area is sharply dissected by deep barranca channels. Elevation is 1,450 m.

**Modern utilization:** The area is planted during the rainy season, maize being the only crop. The field is prepared by oxen.

**Late Formative Occupation:** Archaeological remains: This appears to be a single-component site. Materials from this period are dispersed over a relatively small area. There are indications of small housemounds at the site, although field clearing has begun to erase the remaining surface indications.

**Classification:** Isolated Residence.

#### RAS-50

Latitude: 18° 44' 21.71"

Longitude: 98° 45' 48.43"

**Location:** Southeast of Amilcingo.

**Natural setting:** This site lies just above the 1,450 m contour interval due south of RAS-53. The topographical zone is Flat Plains. The vegetation zone is Huizache Grassland with access to the Barranca zone. The site is 150 m east of the Río Amatzinac on the Barranquilla de las Tres Escaleras. It is situated between two north-south running barrancas where they merge with the Río Amatzinac. Soil is shallow, not exceeding 1 m.

**Modern utilization:** The land is used for grazing and rainfall maize agriculture. The field is plowed with oxen.

**Middle Formative Occupation:** Archae-

ological remains: This site is a simple ceramic dispersion. It is located adjacent to one of the few places where the deep Amatzinac barranca can be crossed. The earliest material found here dates to the Cantera phase.

**Classification:** Cantera phase Isolated Residence.

**Late Formative Occupation:** Archaeological remains: Late Formative materials are scattered over about 1 ha. Mounds at the site probably date to the subsequent Terminal Formative period.

**Classification:** Isolated Residence.

**Other Occupations:** Terminal Formative Small Village (Hirth 1980), Early Postclassic Hamlet, Late Postclassic Hamlet.

#### RAS-51

Latitude: 18° 44' 46.76"

Longitude: 98° 46' 0"

**Location:** East of and adjacent to the modern village of Amilcingo.

**Natural setting:** This site lies 200 m east of the Río Amatzinac at a point of access across the barranca. The topographical zone is Irregular Plains, Slight Relief, and the vegetation zone is Huizache Grassland. The elevation is 1,450 m.

**Modern utilization:** Rainfall maize agriculture is practiced.

**Middle Formative Occupation:** Archaeological remains: The site is a simple ceramic dispersion of Cantera phase materials. Late Postclassic debris impeded our determining a totally accurate estimate of site limits. No structures were recorded.

**Classification:** Cantera phase Isolated Residence.

**Other Occupations:** Terminal Formative Isolated Residence (Hirth 1980), Early Postclassic Isolated Residence, Late Postclassic Hamlet when combined with the materials which form a continuous distribution with RAS-52.

#### RAS-52

Latitude: 18° 44' 38.41"

Longitude: 98° 45' 48.43"

**Location:** East of town of Amilcingo.

**Natural setting:** The site is at the juncture of two barrancas west of the Barranca de las Tres Pilates, just above the 1,450 m contour interval. The topographical zone is Irregular Plains, Slight Relief, and the vegetation zone is Huizache Grassland. The site is 245 m east of the Río Amatzinac.

**Modern utilization:** Rainfall maize agriculture is practiced, using oxen for plowing.

*Middle Formative Occupation:* Archaeological remains: This site consists of a mound and associated ceramic dispersion. The mound appears to be the remains of a small residence. Rubble was moderate. The ceramic dispersion was light north of the mound and covered less than 0.25 ha.

*Classification:* Cantera phase Isolated Residence.

*Other Occupations:* Terminal Formative Isolated Residence (Hirth 1980), Late Postclassic Hamlet when combined with RAS-51.

#### **RAS-53**

Latitude: 18° 44' 25.05"

Longitude: 98° 45' 48.43"

*Location:* Southeast of RAS-52.

*Natural setting:* The site is located between and at the juncture of two barrancas at the 1,450 contour interval. It is 25 m from the Río Amatzinac. The topographical zone is Irregular Plains, Slight Relief, and the vegetation zone is Hui-zache Grassland. Erosion is moderate in this area.

*Modern utilization:* Rainfall maize agriculture.

*Middle Formative Occupation:* Archaeological remains: There was only a trace of Barranca phase material. During the Cantera phase, a simple ceramic dispersion covered over 1 ha. No structures were noted.

*Classification:* Barranca phase Isolated Residence, Cantera phase Isolated Residence.

*Other Occupations:* Terminal Formative Hamlet, Early Classic Isolated Residence.

#### **RAS-54**

Latitude: 18° 42' 33.4"

Longitude: 98° 46' 35.07"

*Location:* Due south of Jantetelco directly adjacent to and north of the Cuautla-Izúcar highway.

*Natural setting:* This site is 395 m west of the Río Amatzinac within the Pithecellobium Woodland zone, on the 1,400 m contour interval. The topographical zone is Flat Plains.

*Modern utilization:* Cultivation is restricted to the rainy season. The field is prepared using teams of oxen. Crops include maize, beans, squash, chilies, and tomatoes.

*Late Formative Occupation:* Archaeological remains: A wide scattering of Late Formative materials was noted. Concentrations were high enough to suggest permanent occupation of the site

throughout the period. A variety of both plain and decorated wares were recovered. Because of the dense Postclassic occupation at this site, it was difficult to determine which areas date specifically to this period.

*Classification:* Hamlet.

*Other Occupations:* Terminal Formative Isolated Residence (Hirth 1980), Early Postclassic Small Village, Late Postclassic Small Village.

#### **RAS-55**

Latitude: 18° 43' 1.67"

Longitude: 98° 47' 35.07"

*Location:* Southeast of the town of Amayuca.

*Natural setting:* Located in the northern Pithecellobium Woodland vegetation zone. The site's topographic zone is Flat Plains. The Río Frío is 645 m to the west, and site elevation is 1,400 m.

*Modern utilization:* The area is planted during the rainy season. Crops include maize and beans. Field preparation is with oxen.

*Late Formative Occupation:* Archaeological remains: This site had a mixed Classic and Postclassic occupation, with traces of material dating to as early as the Late Formative. A good assortment of plainwares was recovered. Some of the material was associated with habitation structures.

*Classification:* Isolated Residence.

*Other Occupations:* Classic Isolated Residence (Hirth 1980), Early Postclassic Isolated Residence, Late Postclassic Hamlet combined with RAS-56.

#### **RAS-58**

Latitude: 18° 43' 25.05"

Longitude: 98° 47' 28.39"

*Location:* East of Amayuca along the Zacualpan-Axochiapan highway.

*Natural setting:* The site is situated in the Flat Plains topographic zone along the 1,400 m contour interval in the northern portion of the valley. The principal vegetation zone is Pithecellobium Woodland. The closest source of permanent water is 0.75 km to the west.

*Modern utilization:* Tomatoes and chilies were planted in this field at the time of our survey.

*Early Formative Occupation:* Archaeological remains: Traces of Amate phase occupation were found. A few sherds and one D2 figurine were recovered along the roadway which passes the site.

*Classification:* Isolated Residence.

*Late Formative Occupation:* Archaeo-

logical remains: Late Formative materials were thinly scattered over a 1.5 ha area. The remains consisted primarily of plain wares. Individual residence units could not be identified.

*Classification:* Isolated Residence.

*Other Occupations:* Terminal Formative Isolated Residence, Classic Isolated Residence (Hirth 1980), Early Postclassic Hamlet, Late Postclassic Hamlet.

#### **RAS-62 (Huazulco)**

Latitude: 18° 44' 25.05"

Longitude: 98° 47' 20.04"

*Location:* Due west of the town of Amilcingo and the Hueyapan-Axochiapan highway.

*Natural setting:* The site is in the northern Pithecellobium Woodland zone between the 1,500 and 1,450 m contour intervals. The topographic zone is Flat Plains. The closest permanent water source is the Río Frío, 595 m to the west.

*Modern utilization:* Maize is planted during the rainy season, with use of oxen for plowing.

*Early Formative Occupation:* Archaeological remains: A small amount of Amate phase ceramics was scattered over the site. One D2 figurine was recovered. No high density areas were noted.

*Classification:* Isolated Residence.

*Middle Formative Occupation:* Archaeological remains: Only a wide scattering of surface debris existed at the time of our survey. Excavations were conducted at this site by Teresita Majewski in the winter of 1974 and are reported in Chapter 22.

*Classification:* Barranca phase Isolated Residence, Cantera phase Hamlet.

*Late Formative Occupation:* Archaeological remains: A thin veneer of Late Formative materials could be found across the site although there are no clearcut concentrations of materials. This material is generally mixed with Cantera phase occupation debris.

*Classification:* Isolated Residence.

*Other Occupations:* Classic Isolated Residence (Hirth 1980), Early Postclassic Isolated Residence, Late Postclassic Isolated Residence.

#### **RAS-65**

Latitude: 18° 44' 31.73"

Longitude: 98° 48' 51.77"

*Location:* Due west of the town of Amilcingo, one field south of the intersection with the Hueyapan-Axochiapan highway.

*Natural setting:* This site lies between

the 1,450 and 1,500 m contour intervals due east of RAS-62 in the Pithecellobium Woodland and Flat Plains zones. It is 1,250 m west of the Río Amatzinac and 980 m east of the Río Frio.

**Modern utilization:** Maize agriculture is practiced during the rainy season. The surrounding fields, however, were irrigated and planted in maize, beans, squash, and peanuts.

**Middle Formative Occupation:** Archaeological remains: The site is defined by a simple ceramic dispersion which includes Amatzinac White ceramics. The ceramics cover 0.35 ha with Middle Formative ceramics distributed over 75 percent of that area. A destroyed mound on the site is probably Classic period, for Classic period debris predominates.

**Classification:** Cantera phase Isolated Residence.

**Late Formative Occupation:** Archaeological remains: A light scattering of Late Formative materials coincided with the distribution of Cantera phase materials.

**Classification:** Isolated Residence.

**Other Occupations:** Terminal Formative Isolated Residence, Early Classic Isolated Residence, Late Classic Isolated Residence (Hirth 1980), Late Postclassic Isolated Residence.

#### **RAS-70**

Latitude: 18° 45' 59.2"

Longitude: 98° 46' 8.35"

**Location:** At the eastern border of the Temoac-Huazulco forest, east-southeast of Temoac and due north of Huazulco.

**Natural setting:** This site lies south of RAS-71 between the 1,500 and 1,550 m contour intervals. The topographical zone is Flat Plains, and the vegetation zone is Pithecellobium Woodland. The site is directly adjacent to the Río Amatzinac barranca and its vegetation zone.

**Modern utilization:** When surveyed the field was fallow with heavy weed cover, which may have biased the measurement of sherd intensities. Corn is grown during the rainy season, and the land is prepared by using teams of oxen.

**Middle Formative Occupation:** Archaeological remains: The site consists of a mound and ceramic dispersion covering 0.5 ha. The mound was probably a residential structure.

**Classification:** Cantera phase Isolated Residence.

**Other Occupation:** Late Postclassic Hamlet.

#### **RAS-71**

Latitude: 18° 46' 5.01"

Longitude: 98° 46' 13.36"

**Location:** 200 m east of Temoac in the *municipio* of Zacualpan.

**Natural setting:** This site is in the Flat Plains topographic zone between the 1,500 and 1,550 m contour intervals. The dominant vegetation is Pithecellobium Woodland, although the site has easy access to the Río Amatzinac and its Barranca zone plant types 115 m to the east. Erosion is moderate.

**Modern utilization:** Maize is planted during the rainy season. The area was partially plowed by oxen at the time of the survey.

**Early Formative Occupation:** Archaeological remains: A good concentration of Amate phase debris was recovered. Rubble in the eastern half of the field in association with Amate phase ceramics may be from residential structures.

**Classification:** Hamlet.

**Middle Formative Occupation:** Archaeological remains: For this period there is a simple ceramic dispersion in which Cantera phase diagnostics predominate. Also present are ground and chipped stone artifacts.

**Classification:** Barranca phase Isolated Residence, Cantera phase Isolated Residence.

**Late Formative Occupation:** Archaeological remains: There is one small cluster of Late Formative debris associated with a small amount of architectural rubble which may have been a residential structure. Only plainwares were found.

**Classification:** Isolated Residence.

**Other Occupations:** Terminal Formative Isolated Residence, Early Classic Isolated Residence (Hirth 1980), Early Postclassic Isolated Residence, Late Postclassic Isolated Residence.

#### **RAS-72**

Latitude: 18° 46' 48.43"

Longitude: 98° 46' 1.67"

**Location:** At the southeast end of the town of Zacualpan.

**Natural setting:** This site is located in the Pithecellobium Woodland zone 70 m west of the Río Amatzinac and the Barranca vegetation zone. It is in the Flat Plains topographic zone, at the 1,575 m contour interval.

**Modern utilization:** The land had been uncultivated for some time and was being used for grazing at the time of the survey.

**Late Formative Occupation:** Archaeological remains: There was a trace of Late Formative period material. Conclusive evidence for permanent occupation was lacking.

**Classification:** Isolated Residence.

**Other Occupations:** Terminal Formative Isolated Residence (Hirth 1980), Late Postclassic Isolated Residence. The bulk of the occupation is Late Postclassic.

#### **RAS-73**

Latitude: 18° 45' 23.38"

Longitude: 98° 46' 30.06"

**Location:** Northwest of the modern town of Huazulco.

**Natural setting:** This site is just below the 1,500 m contour interval. The topographic zone is Flat Plains, and the vegetation zone is Pithecellobium Woodland. The site is 345 m west of the Río Amatzinac and the Barranca vegetation zone.

**Modern utilization:** The area is irrigated and planted in maize and squash. Some of the fields to the west were fallow at the time of our survey.

**Late Formative Occupation:** Archaeological remains: There was a small scatter of Late Formative material. One small mound at this site appears to date to the Late Postclassic.

**Classification:** Isolated Residence.

**Other Occupation:** Late Postclassic Isolated Residence.

#### **RAS-74**

Latitude: 18° 46' 28.39"

Longitude: 98° 46' 13.36"

**Location:** In the cultivated fields on the northeast side of the town of Temoac.

**Natural setting:** This site is in the Pithecellobium Woodland zone 280 m west of the Río Amatzinac. It is on the 1,550 m contour interval within the Flat Plains topographic zone.

**Modern utilization:** The area is irrigated and cropped year round. Maize, beans, and tomatoes were planted in the field at the time of the survey.

**Late Formative Occupation:** Archaeological remains: The site consists of a light scattering of Late Formative materials. No permanent architectural constructions were noted. Only plainwares were recovered in the surface collections, primarily ollas and simple bowls.

**Classification:** Isolated Residence.

**Other Occupation:** Late Postclassic Isolated Residence.



**RAS-75**

Latitude: 18° 46' 30.06"

Longitude: 98° 46' 15.03"

Location: Roughly 300 m northeast of the modern settlement of Temoac and 800 m south of Zacualpan, along a small dirt road separating the two towns.

Natural setting: This site lies above the 1,550 m contour interval, and local relief is less than 30 m. The topographical zone is Flat Plains, and the vegetation zone is *Pithecellobium* Woodland. The site is 260 m from the Río Amatzinac. Erosion is moderate in this area.

Modern utilization: Irrigation cultivation of tomatoes and sugar cane is practiced. More than 50 percent of the surface area was fallow at the time of our research.

*Middle Formative Occupation:* Archaeological remains: The site is a simple ceramic dispersion across two fields located on a terrace elevated 75 cm above the surrounding fields. Both Barranca and Cantera phase materials were recovered but in very low amounts. No architectural features were noted.

Classification: Barranca phase Isolated Residence, Cantera phase Isolated Residence.

*Other Occupations:* Late Classic Isolated Residence (Hirth 1980), Early Postclassic Isolated Residence, Late Postclassic Isolated Residence.

**RAS-78 (San Ignacio)**

Latitude: 18° 35' 0"

Longitude: 98° 45' 8.35"

Location: North of the old hacienda of San Ignacio.

Natural setting: This site is located at and above the 1,100 m contour interval in the Flat Plains topographic zone. The vegetation zone is Huizache Grassland, and the site lies on the Río Amatzinac, providing access to the River Bottomland zone. Soil in this area is 1–2 m deep. Erosion is slight to moderate. The position along the Río Amatzinac is optimal since the side walls are not very steep here. An impermanent drainage lies 95 m to the west.

Modern utilization: Rainfall agriculture of maize, beans, and squash is practiced, and oxen are used for plowing. The Middle Formative portion of the site is located just south of the major Late Classic mound complexes, northwest of the modern village of San Ignacio. The town covers that portion of the site which would extend to the banks of the Río Amatzinac.

*Middle Formative Occupation:* Archaeological remains: The site consists of mounds and a ceramic dispersion. Two mounds were dated to the Middle Formative on the basis of associated diagnostic material and isolation from other portions of the site. These appeared to be habitation structures. Large foundation stones and sandy-whitish soil were associated with the diagnostic ceramics. This area probably had a small, low platform. Middle Formative vessels and a small jade statue were in the possession of local farmers. These artifacts were reported to have been associated with skeletons found when the new school was built. Heavy debris at San Ignacio from the dense Classic occupation has obscured our view of the Middle Formative occupation. The site was probably larger than our observations indicated.

Classification: Barranca phase Hamlet, Cantera phase Hamlet.

*Late Formative Occupation:* Archaeological remains: Late Formative materials are scattered over approximately 30 ha. Unlike some of the other large sites for this phase, the material does not occur in dense clusters. Much of the area containing Late Formative materials was later occupied by Classic period peoples. The highest concentration of material, however, is on the east side of the site, along the Río Amatzinac. The full range of plain and decorated ceramics was recovered.

Classification: Small Village.

*Other Occupations:* Terminal Formative Large Village, Early Classic Regional Center, Late Classic Regional Center, Early Postclassic Small Village, Late Postclassic Large Village.

**RAS-79**

Latitude: 18° 35' 45"

Longitude: 98° 45' 51.77"

Location: In the southern portion of the valley northwest of the town of San Ignacio, about 400 m east of the San Ignacio–Tetelilla railroad station.

Natural setting: This site is situated in the Huizache Grassland vegetation zone. It is 485 m west of the Río Amatzinac within the Flat Plains topographic zone. Elevation is 1,125 m. The soil in this area is 1–2 m deep.

Modern utilization: The area is cultivated only during the rainy season. The land is prepared with a tractor, and maize is the only crop grown.

*Late Formative Occupation:* Archaeological remains: There was a very light

occupation of this site during this time. Tractor plowing has obscured most surface indications of occupation.

Classification: Isolated Residence.

*Other Occupations:* Terminal Formative Isolated Residence, Early Classic Isolated Residence (Hirth 1980).

**RAS-81**

Latitude: 18° 34' 6.68"

Longitude: 98° 46' 6.68"

Location: 2.5 km east of the town of Tepalcingo.

Natural setting: This site is in the Huizache Grassland vegetation zone on the 1,025 m contour interval within the Flat Plains topographic zone. It is several kilometers west of the Río Amatzinac, the closest permanent water source.

Modern utilization: The area had not been cultivated for several years prior to the survey and was being used for occasional cattle grazing. This field is located at the lowest end of a *jagüey* (large pool) irrigation system.

*Late Formative Occupation:* Archaeological remains: A light scatter of Late Formative materials was found across the site. Residential architecture is suggested by the accumulation of rock debris in the area of the ceramic concentrations, whereas it is typically absent from adjacent fields. This is a single-component site.

Classification: Isolated Residence.

**RAS-84**

Latitude: 18° 36' 11.69"

Longitude: 98° 48' 33.4"

Location: 2.5 km east of the town of Tepalcingo.

Natural setting: This site is on the 1,125 m contour interval within the Flat Plains of the southern valley. The vegetation zone is Huizache Grassland. The site is located on a small impermanent drainage and is more than 1 km from the closest permanent water source. The soil is a loose, dark loam. Erosion is slight to moderate.

Modern utilization: Irrigated fields planted in corn, beans, and squash occur directly to the south and east of the site. Plowing is done by tractor.

*Middle Formative Occupation:* Archaeological remains: A trace of Cantera phase material was found. There is no clearcut evidence for permanent occupation at this time.

Classification: Cantera phase Isolated Residence.

*Late Formative Occupation:* Archaeo-



logical remains: Vegetation was very dense at the time of the survey, obscuring surface accumulations. Only a light scattering of Late Formative materials was found. Large-scale architecture at the site appears to belong to the Classic period.

Classification: Isolated Residence.

*Other Occupations:* Terminal Formative Small Village, Early Classic Small Village, Late Classic Hamlet (Hirth 1980).

#### **RAS-89**

Latitude: 18° 34' 58.45"

Longitude: 98° 48' 21.71"

Location: In the southern valley 3.5 km east of Tepalcingo.

Natural setting: The site lies in the Huizache Grassland vegetation zone and the Flat Plains topographic zone, on the 1,100 m contour interval several kilometers from the Río Tepalcingo, the closest source of permanent water.

Modern utilization: This area is cultivated only during the rainy season. Crops include maize, beans, and squash, and the fields are prepared with oxen.

*Late Formative Occupation:* Archaeological remains: A slight trace of Late Formative material was noted. There were no indications of permanent residential structures.

Classification: Isolated Residence.

*Other Occupations:* Terminal Formative Hamlet (Hirth 1980), Late Postclassic Isolated Residence.

#### **RAS-95**

Latitude: 18° 37' 10.02"

Longitude: 98° 46' 23.52"

Location: On a small outwash north of the town of Tetelilla.

Natural setting: The site is in the Huizache Grassland vegetation zone over 2 km from any source of permanent water. It is on the 1,200 m contour interval in the Flat Plains topographic zone. The soil is very shallow here, averaging between 50 and 75 cm in thickness. There was a surface accumulation of large and medium-sized rocks.

Modern utilization: This area has been fallow for quite some time. No old field boundaries could be located. Rainfall agriculture is practiced in fields 150 m to the east.

*Late Formative Occupation:* Archaeological remains: Surface collections were poor at this site because of the lack of ground disturbance. While some architecture dates to the subsequent Terminal Formative period, it appears that most of

the small structures date to the Late Formative. Permanent residence is evident by accumulations of ground stone artifacts and fire-cracked rock on and about small house mounds with Late Formative materials.

Classification: Hamlet.

*Other Occupations:* Terminal Formative Hamlet (Hirth 1980), Early Postclassic Isolated Residence.

#### **RAS-100**

Latitude: 18° 37' 15.03"

Longitude: 98° 46' 3.34"

Location: Due north of the modern village of Tetelilla in the *municipio* of Jonacatepec.

Natural setting: The site is located on a level gradient next to an impermanent drainage, which passes the Cerro Tenango on its west face. The site is just below the 1,200 m contour interval 1.29 km from the Río Amatzinac. The topographic zone is Flat Plains, and the vegetation zone is Huizache Grassland. The soil is very shallow in this region, and on the average does not exceed 50 cm in thickness.

Modern utilization: The area was fallow at the time of the survey and was partially covered with *huizache*. A portion of the site, however, is planted during the rainy season in maize. The field is prepared by using oxen.

*Middle Formative Occupation:* Archaeological remains: A small ceramic dispersion was found, consisting primarily of plainware. The site extends over 0.7 ha. No architectural features were noted.

Classification: Cantera phase Isolated Residence.

*Late Formative Occupation:* Archaeological remains: A light scatter of ceramics was found distributed across approximately 0.5 ha.

Classification: Isolated Residence.

*Other Occupation:* Early Classic Isolated Residence (Hirth 1980).

#### **RAS-107**

Latitude: 18° 41' 35.07"

Longitude: 98° 47' 8.35"

Location: North of and adjacent to the ex-hacienda Santa Clara beside the road to Chalcatzingo.

Natural setting: The site is located on a slight rise in the Flat Plains topographical zone. It is between the 1,350 and 1,400 m contour intervals, in the Pithecellobium Woodland vegetation zone. The Río Amatzinac lies 1.46 km to the east.

Modern utilization: The area is used for rainfall maize cultivation, with use of oxen for plowing.

*Middle Formative Occupation:* Archaeological remains: This site is a simple ceramic dispersion. Traces of both Barranca and Cantera phase materials were noted. There was no clearcut evidence of permanent occupation.

Classification: Barranca phase Isolated Residence, Cantera phase Isolated Residence.

*Other Occupations:* Terminal Formative Isolated Residence (Hirth 1980), Early Postclassic Isolated Residence, Late Postclassic Isolated Residence.

#### **RAS-108**

Latitude: 18° 35' 43.42"

Longitude: 98° 43' 15.03"

Location: In the *municipio* of Jonacatepec, southeast of the *ranchería* San Antonio.

Natural setting: The site is situated on the slope of a small hill between the 1,100 and 1,150 m contour intervals. This small hill is composed primarily of red chert. The vegetation zone is Huizache Grassland, and the topographical zone is Open Low Hills. The nearest permanent water is the Río Nexapa 540 m to the east. Soil at this site is shallow and does not exceed 1 m in depth.

Modern utilization: Although the area on top of the hill is not cultivated, the surrounding fields were planted in rice at the time of the survey.

*Middle Formative Occupation:* Archaeological remains: This site is a simple ceramic dispersion covering 0.75 ha. There was also an unusual amount of red chert cores, worked and unworked, throughout the area, indicating that it was a quarry site. This same type of red chert is found at many sites in the valley and may be evidence of a local exploitation and redistribution system. A limited amount of residential debris was also found, although occupation need not have been year round. This is a single component site.

Classification: Cantera phase Isolated Residence.

#### **RAS-109**

Latitude: 18° 35' 59.8"

Longitude: 98° 43' 5.01"

Location: At the Paso de los Coches which leads to a spring-fed swimming pool in the eastern part of the state of Puebla.

Natural setting: This site is located on

the eastern side of the Río Nexapa, on the 1,150 m contour interval in the slightly rolling foothills adjacent to a pass across the barranca. The topographical zone is Open Low Hills, and the vegetation corresponds to the Barranca zone. Soil depth as measured from a roadcut does not exceed 50 cm, and erosion is moderate to heavy across these slopes. The site is 150 m from permanent water.

**Modern utilization:** The site was not being cultivated at the time of the survey.  
**Middle Formative Occupation:** Archaeological remains: A portion of the site was exposed in the roadcut sidewall, and several complete blackware *botellones* were procured by cleaning the sidewall. Not much site area could be identified, and site size could be estimated at roughly only 0.25 ha. It was probably located so as to take advantage of hillside slope resources. This is a single-component site.

**Classification:** Cantera phase Isolated Residence.

#### **RAS-110**

Latitude: 18° 36' 10.02"

Longitude: 98° 43' 11.69"

**Location:** Overlooking the Río Nexapa southeast of the town of San Antonio in the southern valley.

**Natural setting:** The site is situated at the interface of a number of vegetation zones, including the River Bottomland and Huizache Grassland. The topographic zone is Open Low Hills, and the site lies along the 1,125 m contour. The site slopes toward the river.

**Modern utilization:** The site was uncultivated at the time of the survey and had been fallow for several years. Most of the area was covered with *huizache* and was suitable only for grazing.

**Late Formative Occupation:** Archaeological remains: There was a trace of Late Formative materials, with no evidence for permanent habitation.

**Classification:** Isolated Residence.

**Other Occupations:** Terminal Formative Isolated Residence (Hirth 1980), Late Postclassic Isolated Residence.

#### **RAS-111**

Latitude: 18° 37' 33.4"

Longitude: 98° 43' 13.36"

**Location:** Between 2 and 3 km east of the town of Tenango near the Barranca de los Santos.

**Natural setting:** The site is in the Huizache Grassland vegetation zone and the Flat Plains topographic zone. The closest permanent water is the Barranca de los

Santos 525 m to the east. The site lies on the 1,200 m contour interval.

**Modern utilization:** The area was uncultivated at the time of the survey but appeared to have been cultivated in the immediate past.

**Late Formative Occupation:** Archaeological remains: Surface collections were inadequate considering the importance of the site. The entire site was covered by a pavement of hard-packed earth and small rocks, which hid the artifactual debris. The large-scale architecture found here dates to later periods, particularly the Classic. Late Formative materials were found in different areas of the site, especially on the southern end. No associations between ceramics and other artifact categories could be made because of the disturbance by later peoples.

**Classification:** Hamlet.

**Other Occupations:** Terminal Formative Hamlet, Early Classic Small Village, Late Classic Small Village (Hirth 1980).

#### **RAS-112 (El Palacio)**

Latitude: 18° 32' 33.4"

Longitude: 98° 50' 13.36"

**Location:** Along the Ixtlilco el Grande—Ixtlilco el Chico mountain road in the *municipio* of Tepalcingo.

**Natural setting:** This site is situated on rolling hills bordering the west side of the Río Frío in the southern portion of the valley. It is on the 1,075 m contour interval in the Irregular Plains, Slight Relief, topographic zone. The vegetation is mixed River Bottomland and Huizache Grassland. A spring lies to the east of the Río Frío. Soil depth is variable, ranging from 1 to 3 m.

**Modern utilization:** The lower portions of the site are irrigated, and maize and beans are grown. Oxen are used for preparing the fields. The upper portions of the site are open for grazing.

**Early Formative Occupation:** Archaeological remains: A surface scatter of Amate phase ceramics was found on the small terraces overlooking the spring. Additional figurines and sherds were found in the area just east of the Middle Formative terrace occupation.

**Classification:** Hamlet.

**Middle Formative Occupation:** Archaeological remains: The bulk of the Middle Formative occupation is related to the upper terraced areas and the lower area in front of these terraces. A ball court situated in front of these terraces produced a large quantity of Middle Formative ceramics, and the soil of which it was con-

structed was of a different type and texture from the parent soil across the same area. It appears to have been constructed with loadings taken from areas of prior Middle Formative occupation. A low platform structure, largely destroyed, of probable Middle Formative date was located on the west side of the site. Some of the terraces on the west slopes definitely have Middle Formative residential debris on them and undoubtedly were constructed during this period.

**Classification:** Barranca phase Small Village, Cantera phase Small Village.

**Late Formative Occupation:** Archaeological remains: Late Formative materials are located on the west central portion of the site along the road and on the east side of the site beside the Río Frío. Architectural structures of both the Classic and Postclassic periods cover the intervening area. It is difficult to say whether any of the structures date to the Late Formative. It is likely, however, given the size of the site and the continuity of settlement from the Cantera phase through the Classic, that Late Formative mounds were part of the overall site design. Late Formative materials were found in dense concentrations.

**Classification:** Small Village.

**Other Occupations:** Terminal Formative Small Village, Early Classic Large Village, Late Classic Small Village (Hirth 1980), Early Postclassic Hamlet, Late Postclassic Small Village.

#### **RAS-114**

Latitude: 18° 31' 31.73"

Longitude: 98° 48' 20.04"

**Location:** In the southern portion of the valley due west of the town of Quebrantadero.

**Natural setting:** The site is situated on the 1,000 m contour interval in the Irregular Plains, Slight Relief, topographic zone. Two vegetation zones come together at the site, the Huizache Grassland and the River Bottomland. The closest permanent water source is the Río Frío 870 m to the south.

**Modern utilization:** The area is cultivated during the rainy season. Field preparation is with oxen.

**Late Formative Occupation:** Archaeological remains: A small scatter of Late Formative materials was found. No residential architecture was observed.

**Classification:** Isolated Residence.

**Other Occupations:** Early Classic Isolated Residence (Hirth 1980).

### RAS-121

Latitude: 18° 32' 38.41"  
Longitude: 98° 49' 46.76"

Location: In the southern valley along the 1,000 m contour interval alongside the Río Tepalcingo due north of Ixtlilco el Grande.

Natural setting: The vegetation zones in this area are the Huizache Grassland and the River Bottomland. The topographic zone is Flat Plains.

Modern utilization: The area is cultivated during the rainy season. Field preparation is with oxen, and the principal crops are maize and chilies.

*Late Formative Occupation:* Archaeological remains: A scatter of Late Formative material was found on the central portion of the site. Concentrations of rubble and several low mounds suggest destroyed residential structures.

Classification: Hamlet.

*Other Occupations:* Terminal Formative Isolated Residence, Early Classic Hamlet, Late Classic Isolated Residence (Hirth 1980).

### RAS-127

Latitude: 18° 33' 30.06"  
Longitude: 98° 50' 15.03"

Location: At the southeast corner of Ixtlilco el Chico in the southern valley.

Natural setting: The site lies alongside a small impermanent drainage. The topographic zone is Flat Plains, and the site shares two vegetation zones, the Huizache Grassland and the River Bottomland. The nearest permanent water source is the Río Frío 285 m to the east. The site is located on the 1,000 m contour interval.

Modern utilization: A portion of the site is terraced, going down into the barranca. The area is cultivated during the rainy season, and maize and beans are grown.

*Late Formative Occupation:* Archaeological remains: A very light scatter of Late Formative materials was found. There were no indications of permanent occupation.

Classification: Isolated Residence.

*Other Occupation:* Late Postclassic Hamlet.

### RAS-128

Latitude: 18° 33' 45.09"  
Longitude: 98° 50' 20.04"

Location: East of Ixtlilco el Chico in the southern valley.

Natural setting: The site lies along a small impermanent drainage. The topographic zone is Flat Plains, and the site

has access to two vegetation zones, the Huizache Grassland and the River Bottomland. It is on the 1,025 m contour interval. The nearest permanent water source is the Río Frío 795 m to the east.

Modern utilization: The site area is cultivated in maize, beans, and squash during the rainy season. Field preparation is by oxen plowing.

*Late Formative Occupation:* Archaeological remains: Late Formative materials are scarce. There is a small distribution over the northern portion of the site. Indications of structures are lacking for this time period.

Classification: Isolated Residence.

*Other Occupation:* Late Postclassic Hamlet.

### RAS-129

Latitude: 18° 33' 26.72"  
Longitude: 98° 50' 21.71"

Location: Southeast of Ixtlilco el Chico in the *municipio* of Tepalcingo.

Natural setting: This site is located between two impermanent drainages between the 1,000 and 1,050 m contour intervals. The topographic zone is Flat Plains, and the vegetation zone is Huizache Grassland. The Río Frío is 585 m to the east. Soil depth is less than 1 m.

Modern utilization: Rainfall maize agriculture.

*Middle Formative Occupation:* Archaeological remains: A simple ceramic dispersion covers 0.9 ha. There is a moderate amount of residential debris in the form of ground stone artifacts and house construction debris.

Classification: Cantera phase Isolated Residence.

*Other Occupations:* Early Postclassic Isolated Residence, Late Postclassic Isolated Residence.

### RAS-144 (Telixtac)

Latitude: 18° 33' 41.75"  
Longitude: 98° 45' 1.67"

Location: Lies along and is cut by the Axochiapan railroad southwest of San Ignacio.

Natural setting: The site is between the 1,050 and 1,100 m contour intervals in the Flat Plains topographic zone. The vegetation zone is principally Huizache Grassland, mixed with some River Bottomland. Impermanent drainages pass the site on both the north and south, while the nearest permanent water lies 1.35 km to the east.

Modern utilization: The site was fal-

low at the time of the survey and lacked evidence of recent agricultural activity.

*Middle Formative Occupation:* Archaeological remains: The site consists of two small platform mounds and a ceramic dispersion covering an area of 2.1 ha. The larger mound has been cut by the railway, and the other is also greatly destroyed. There is evidence for residence, but from surface indications it appears to have been relatively light. The major occupation occurred during the Cantera phase. Irrigation soil markings appearing on aerial photos to the south of this site may be Classic. Excavations were carried out here, and the results are reported in Chapter 22.

Classification: Barranca phase Isolated Residence, Cantera phase Hamlet.

### RAS-156

Latitude: 18° 32' 18.37"  
Longitude: 98° 47' 25.05"

Location: Due north of Quebrantadero in the *municipio* of Axochiapan.

Natural setting: This site is located adjacent to the conjunction of two impermanent drainages just below the 1,050 m contour interval. The topographic zone is Flat Plains, and the vegetation zone is Huizache Grassland. The site is 3.03 km from the Río Frío. The soil is less than 1 m in depth.

Modern utilization: Rainfall maize cultivation is practiced using tractor plowing.

*Middle Formative Occupation:* Archaeological remains: The site extends over 0.51 ha with trace concentrations of Middle Formative material.

Classification: Cantera phase Isolated Residence.

*Other Occupations:* Combined with RAS-152, Early Classic Hamlet, Late Classic Hamlet (Hirth 1980).

### RAS-164

Latitude: 18° 31' 25.05"  
Longitude: 98° 46' 48.43"

Location: East of Quebrantadero just north of the first bridge crossing along the highway to Axochiapan.

Natural setting: This site is located at the 1,000 m contour interval along an impermanent drainage. It is 50 m south of a spring, and the Río Frío lies 2.21 km to the southwest. The topographic zone is Flat Plains, and the vegetation zone is Huizache Grassland. The soil depth is between 1 and 2 m.

Modern utilization: Rainfall cultiva-

tion of maize is practiced using oxen for plowing.

*Middle Formative Occupation:* Archaeological remains: At least one mound at this site dates to the Middle Formative occupation. Permanent residence is clearly indicated. The extent of the Cantera phase occupation appears slightly more than double that of the Barranca phase.

Classification: Barranca phase Hamlet, Cantera phase Small Village.

*Late Formative Occupation:* Archaeological remains: This site is a good example of Small Village communities during the Late Formative. Fortunately, later occupations were not extensive enough to completely obscure the nature of settlement. A little more than 9 ha were occupied during this phase. Ceramic and other artifact categories are tightly clustered in and around the mounds, three of which date to the Late Formative. Clear evidence for residential structures was found around and away from these mounds.

Classification: Small Village.

#### **RAS-166**

Latitude: 18° 31' 30.06"

Longitude: 98° 43' 46.76"

Location: In the southern valley about 4 km northeast of Axochiapan.

Natural setting: The site is situated in the Huizache Grassland vegetation zone just under 2 km from the nearest source of permanent water, the Río Amatzinac. The topographic zone is Flat Plains, and the site is on the 1,025 m contour interval.

Modern utilization: The area is cultivated using teams of oxen during the rainy season. The principal crop is maize. *Late Formative Occupation:* Archaeological remains: A light distribution of Late Formative plainwares without marked buildups of construction debris was noted during the survey.

Classification: Isolated Residence.

*Other Occupations:* Early Classic Isolated Residence (Hirth 1980), Late Postclassic Isolated Residence.

#### **RAS-168**

Latitude: 18° 30' 25.05"

Longitude: 98° 43' 35.07"

Location: Due northeast of the Axochiapan railroad station.

Natural setting: This site is on the 1,025 m contour interval next to a large impermanent drainage and is more than a mile from the Río Amatzinac. It has ac-

cess to the Huizache Grassland vegetation zone and is in the Irregular Plains, Slight Relief, topographic category.

Modern utilization: Rainfall agriculture of maize, squash, and beans is practiced using oxen for plowing.

*Middle Formative Occupation:* Archaeological remains: A light scatter of Cantera phase materials was located about 75 m west of the impermanent barranca. A small amount of residential debris could be detected, although it was difficult to distinguish the Formative residence areas from the heavy Classic debris at the site.

Classification: Cantera phase Isolated Residence.

*Late Formative Occupation:* Archaeological remains: Late Formative materials are scattered over a wide area of the site. Unfortunately, the heavy Classic period occupation has obscured the nature and distribution of Late Formative Materials. Only plainwares were recovered from the surface.

Classification: Isolated Residence.

*Other Occupations:* Terminal Formative Isolated Residence, Early Classic Small Village, Late Classic Small Village. Classic occupations describe the site RAS-168/220 (Hirth 1980).

#### **RAS-169**

Latitude: 18° 32' 30.06"

Longitude: 98° 44' 55.08"

Location: Due west of Atlacahualoya several hundred meters from the edge of town out onto the surrounding agricultural fields.

Natural setting: This area is in the Flat Plains topographic zone and the Huizache Grassland vegetation zone. The nearest permanent water source is the Río Amatzinac 500 m to the east. Elevation is 1,050 m.

Modern utilization: The area is irrigated and oxen-plowed. Crops planted at the time of the survey included maize, beans, and squash.

*Late Formative Occupation:* Archaeological remains: Late Formative materials were mixed with colonial and Late Postclassic artifacts. The percentage of materials from this period was very low.

Classification: Isolated Residence.

*Other Occupations:* Late Postclassic Hamlet, colonial activity.

#### **RAS-176**

Latitude: 18° 31' 48.43"

Longitude: 98° 42' 21.71"

Location: On the west side of the Río

Nexapa west of the town of Tzompahuacan, Puebla.

Natural setting: The site has access to two vegetation zones, the Huizache Grassland and the River Bottomland. The topographic zone is Flat Plains, and elevation is 1,025 m. The site is only 70 m from the Río Nexapa.

Modern utilization: The area is cultivated during the rainy season, and maize is grown. Field preparation is with oxen.

*Late Formative Occupation:* Archaeological remains: Late Formative materials were lightly distributed over 0.25 ha. Concentrations of material were low. There was no evidence of permanent structures.

Classification: Isolated Residence.

*Other Occupation:* Classic Isolated Residence (Hirth 1980).

#### **RAS-182**

Latitude: 18° 31' 1.67"

Longitude: 98° 48' 1.67"

Location: West of the town of Quebrantadero and due east of the town of Contla.

Natural setting: The site is located in the Huizache Grassland 490 m east of the Río Frio in the southern portion of the valley. The topographic zone is Irregular Plains, Slight Relief. Elevation is 1,000 m. Erosion is moderate, and the soil is shallow.

Modern utilization: Mainly used for grazing cattle.

*Early Formative Occupation:* Archaeological remains: A small scatter of Amate phase materials is present at this site. There are no large buildups, however, to suggest a long occupation.

Classification: Isolated Residence.

*Middle Formative Occupation:* Archaeological remains: The site covers 0.38 ha with only a trace of occupation. No other features were noted.

*Other Occupation:* Early Classic Isolated Residence (Hirth 1980).

#### **RAS-189**

Latitude: 18° 30' 50.10"

Longitude: 98° 47' 18.37"

Location: South-southeast of Quebrantadero in an area highly dissected by impermanent barrancas.

Natural setting: This site is located at the 1,000 m contour interval on a rolling hillslope overlooking a winding impermanent barranca. The topographic zone is Irregular Plains, and the vegetation zone is Huizache Grassland with River Bottomland. The soil is very shallow

here and erosion is slight to moderate.

Modern utilization: The area is fallow and used only for occasional grazing.

*Middle Formative Occupation:* Archaeological remains: The site is best characterized as a mound with ceramic dispersals. Two small house mounds were identified.

Classification: Barranca phase Isolated Residence, Cantera phase Hamlet.

*Other Occupation:* Possible Late Postclassic Isolated Residence.

#### RAS-200

Latitude: 18° 32' 58.9"

Longitude: 98° 42' 23.38"

Location: South of the modern village of Coayuca in the state of Puebla.

Natural setting: The site is located on the floodwater plain adjacent to the Río Nexapa just below the 1,050 m contour interval. The topographic zone is Irregular Plains, Slight Relief. The vegetation zone is mixed, comprised of Huizache Grassland, River Bottomland, and Tetlaleras zones. The soil is about 1.5 m deep.

Modern utilization: Irrigation agriculture of corn and tomatoes is practiced, and both oxen and tractor plowing are employed.

*Middle Formative Occupation:* Archaeological remains: The site extends over 0.75 ha with light Cantera phase ceramic distributions. It was an ideal location for agriculture because of the low barranca sidewalls and the potential for floodwater irrigation. The site has been damaged by occasional inundation of the Río Nexapa. Residential debris is still clearly visible.

Classification: Cantera phase Isolated Residence.

*Late Formative Occupation:* Archaeological remains: Classic and Late Postclassic components have obscured the distribution of materials from this period. There is clear evidence for utilization during the Late Formative along the eastern edge of the site.

Classification: Isolated Residence.

*Other Occupations:* Terminal Formative Isolated Residence, Early Classic Hamlet, Late Classic Small Village (Hirth 1980), Early Postclassic Hamlet, Late Postclassic Small Village.

#### RAS-201

Latitude: 18° 31' 58.45"

Longitude: 98° 42' 8.35"

Location: Northwest of the Puebla village of Tzompahuacan.

Natural setting: The site is on a small

natural terrace on the northeast side of the Río Nexapa, just below the 1,050 m contour interval in the irregular Plains, Slight Relief, topographic zone. No rubble or erosion other than possible Nexapa flooding was observed. The principal vegetation zones are Huizache Grassland and River Bottomland.

Modern utilization: The area is fallow and used for cattle grazing.

*Middle Formative Occupation:* Archaeological remains: There was a light dispersion of residential debris over the site without any notable structural features. The site is 0.33 ha in size and lies just above the edge of the normal Nexapa floodplain.

*Other Occupations:* Terminal Formative Isolated Residence, Early Classic Hamlet, Late Classic Hamlet (Hirth 1980), Late Postclassic Hamlet.

#### RAS-209

Latitude: 18° 32' 38.41"

Longitude: 98° 43' 41.75"

Location: Northeast of Atlacahualoya.

Natural setting: The site is located along the Río Amatzinac just above the 1,050 m contour interval. The topographic zone is Irregular Plains, Slight Relief, and the vegetation zones are Huizache Grassland and River Bottomland. An impermanent drainage lies 450 m to the east.

Modern utilization: Rainfall cultivation of maize, beans, and squash is practiced. The area is plowed by tractor.

*Middle Formative Occupation:* Archaeological remains: The site extends over 1.95 ha with light Middle Formative debris spread over the entire area.

Classification: Cantera phase Hamlet.

*Other Occupations:* Early Postclassic Isolated Residence, Late Postclassic Small Village.

#### RAS-210

Latitude: 18° 30' 0"

Longitude: 98° 43' 51.77"

Location: Just to the south of the Achiapan railroad station. The site was disturbed when the railroad was built, which helped make it easier to locate.

Natural setting: The site is between the 1,000 and 1,050 m contour intervals north of an impermanent drainage. The topographic zone is Flat Plains, and the vegetation zone is Huizache Grassland. The nearest permanent water source is the Río Amatzinac 2.09 km to the east.

Modern utilization: The area today is moderately wooded.

*Middle Formative Occupation:* Archaeological remains: The site is a thin ceramic scatter which extends over an area of 0.32 ha. No structures were noted.

Classification: Cantera phase Isolated Residence.

*Other Occupation:* Late Classic Isolated Residence (Hirth 1980).

#### RAS-221

Latitude: 18° 30' 56.78"

Longitude: 98° 43' 25.05"

Location: In the southern valley about 3 km northwest of Atzitzica.

Natural setting: This site is located in the southern Huizache Grassland vegetation zone. The topographic zone is Flat Plains, and elevation is 1,025 m. The closest permanent water source is the Río Amatzinac 1.25 km to the east. The site is directly adjacent to a large impermanent barranca.

Modern utilization: The area had not been cultivated for several years. Old field boundaries could be found, and it is possible that the field was on a long crop rotation cycle at the time of the survey.

*Late Formative Occupation:* Archaeological remains: A scatter of Late Formative ceramics was located and collected. Both plain and decorated wares were found. However, the greatest concentration of materials was obscured by a heavy Classic occupation.

Classification: Isolated Residence.

*Other Occupation:* Early Classic Isolated Residence (Hirth 1980).

#### RAS-225

Latitude: 18° 29' 36.50"

Longitude: 98° 42' 10.00"

Location: Adjacent to the floodplain of the Río Nexapa north of the town of Chimalcatlan.

Natural setting: The site lies within a meander loop of the Río Nexapa which borders the site on its north, east, and south sides. The vegetation zones available are River Bottomland and Huizache Grassland on the bluffs to the west. The topographic zone is Flat Plains. Elevation is 1,000 m.

Modern utilization: The area is terraced and irrigated by water drawn from the Río Nexapa. Tractors are used for plowing. Crops include tomatoes, sugarcane, maize, beans, and squash. Some site destruction has taken place because of the preparation of the irrigation system and the modification of terraces which put each individual field at a different level.

*Middle Formative Occupation:* Archaeological remains: The site is a simple ceramic dispersion over 3.80 ha. Mounds associated with the site are Late Postclassic in date, as in the bulk of the site area. The site lies in a favorable micro-environment for agriculture. The terraces here are clearly prehispanic, since they support a number of the large mounds.

*Classification:* Cantera phase Hamlet.  
*Late Formative Occupation:* Archaeological remains: Late Formative materials were collected from all portions of the site, an extent of approximately 4.5 ha. Heavy plowing has disturbed all previous structures except the ceremonial mounds on the terraces. A wide selection of ceramic types was collected.

*Classification:* Small Village.  
*Other Occupations:* Terminal Formative Hamlet, Early Classic Small Village, Late Classic Small Village (Hirth 1980), Early Postclassic Hamlet, Late Postclassic Large Village.

#### **RAS-229**

Latitude: 18° 29' 33.00"

Longitude: 98° 42' 0"

*Location:* Due west of Chimalcatlan.

*Natural setting:* The site is located near an impermanent barranca 570 m west of the Río Nexapa at the 1,000 m contour interval. The topographic zone is Open Low Hills, and the site has access to both the Huizache Grassland and River Bottomland vegetation zones.

*Modern utilization:* Maize is cultivated during the rainy season.

*Middle Formative Occupation:* Archaeological remains: This is a single-component site which consists of a simple ceramic dispersion. It extends over an area of 0.27 ha. Noticeable architectural features were lacking.

*Classification:* Cantera phase Isolated Residence.

#### **RAS-231**

Latitude: 18° 29' 43.00"

Longitude: 98° 42' 10.00"

*Location:* Due west of Chimalcatlan and RAS-229.

*Natural setting:* The site lies along an impermanent barranca at the 1,000 m contour interval. The closest permanent water source is the Río Nexapa 1.02 km to the east. The topographic zone is Open Low Hills, and the site has access to both the River Bottomland and Huizache Grassland vegetation zones. The

soil is very shallow throughout the whole area.

*Modern utilization:* The site is fallow and used only for occasional grazing.

*Middle Formative Occupation:* Archaeological remains: The site is a small ceramic scatter lacking features. It extends over an area less than 0.50 ha.

*Classification:* Cantera phase Isolated Residence.

*Other Occupation:* Early Postclassic Isolated Residence.

#### **RAS-232**

Latitude: 18° 37' 38.41"

Longitude: 98° 49' 36.74"

*Location:* East of the Tepalcingo road, 1 km south of the railroad crossing.

*Natural setting:* The site is located on a low plain adjacent to the Río Frio between the 1,150 and 1,200 m contour intervals. The topographic zone is Flat Plains, and the site has access to both the Huizache Grassland and River Bottomland vegetation zones. The nearest impermanent drainage is 1.68 km to the east. Soil appears shallow and does not exceed 1 m in depth.

*Modern utilization:* Rainfall cultivation of corn, beans, and squash is practiced. Soil preparation is with oxen.

*Middle Formative Occupation:* Archaeological remains: The site consists of a mound and ceramic scatter. The mound, which appears to be residential, cannot definitely be assigned a temporal association because both Classic and Middle Formative debris were found on and around it. Middle Formative debris is scattered over less than 0.5 ha.

*Classification:* Barranca phase Isolated Residence, Cantera phase Isolated Residence.

*Other Occupation:* Classic Isolated Residence (Hirth 1980).

#### **RAS-243**

Latitude: 18° 38' 33.4"

Longitude: 98° 45' 15.03"

*Location:* At the southeast corner of the Cerro Tenango alongside the Río Amatzinac.

*Natural setting:* The site lies in a natural pocket formed by the eastern slopes of the Cerro Tenango and the Río Amatzinac. It has access to the Pithecellobium Woodland, Barranca, Huizache Grassland, and Interior Valley Cerros vegetation zones. The topographic zone is Low Mountains. Elevation is 1,250 m.

*Modern utilization:* The area had not been cultivated the year before the sur-

vey, although old field boundaries were clearly visible. Agriculture in this area depends on seasonal rainfall.

*Middle Formative Occupation:* Archaeological remains: The Middle Formative material lies around one fairly substantial mound and seven small clusters of rock identified as possible house formations. This material is scattered over 2.50 ha. To the south of the Middle Formative component is a large Classic and Late Postclassic occupation both on the fan in front of the Cerro slopes and on the terraces which extend up onto it. Only a few Middle Formative sherds were reported from these terraces, and they may not have been in situ material.

*Classification:* Barranca phase Isolated Residence, Cantera phase Hamlet.

*Late Formative Occupation:* Archaeological remains: Late Formative material is scattered over 9 ha. It is a light distribution, however, and there are no clear-cut marked buildups as might be expected around former residence structures. The heaviest concentrations are on the lower terraced slopes on the northeast side of the site. Unfortunately the later occupations at this site have disturbed materials from this occupation period. Only plainwares were recovered.

*Classification:* Hamlet.

*Other Occupations:* Terminal Formative Small Village, Early Classic Small Village, Late Classic Small Village (Hirth 1980), Early Postclassic Small Village, Late Postclassic Large Village.

#### **RAS-257**

Latitude: 18° 38' 45.09"

Longitude: 98° 46' 36.74"

*Location:* Near the town of Joncatepec.

*Natural setting:* Between the 1,250 and 1,300 m contour intervals in the Low Mountains topographical zone. The vegetation zone is Interior Valley Cerros. Erosion is severe, and the soil is less than 60 cm deep. The Río Amatzinac is the closest permanent water source, lying 2.94 km to the east. An impermanent water source is 90 m to the west.

*Modern utilization:* The area is uncultivated huizache grassland.

*Middle Formative Occupation:* Archaeological remains: There is a trace of Cantera phase debris. No ground stone artifacts or evidence of permanent structures were found. This is a single-component site.

*Classification:* Cantera phase Isolated Residence.

# RAS-258

Latitude: 18° 40' 0"

Longitude: 98° 48' 41.75"

Location: West-northwest of Las Lomas Chicas just off the southern road to Axochiapan in the *municipio* of Jonacatepec.

Natural setting: The site is located at the southern edge of the Pithecellobium Woodland vegetation zone. The topographic zone is Flat Plains. The site is 45 m east of an impermanent drainage, and 780 m east of the Río Frío. Elevation is 1,300 m. Erosion is slight, and the soil is less than 1 m deep.

Modern utilization: Maize is cultivated during the rainy season, and the field is prepared with teams of oxen.

*Middle Formative Occupation:* Archaeological remains: A light ceramic scatter covered 0.43 ha. Rubble was moderate. One small house mound was located, but it is in poor condition due to plowing. Artifacts collected included domestic ceramics, manos, and metates.

Classification: Cantera phase Isolated Residence.

*Late Formative Occupation:* Archaeological remains: A light scatter of Late Formative material was associated with the Cantera phase occupation areas. The association of Cantera and Late Formative material suggests continuity in the site's occupation.

Classification: Isolated Residence.

# RAS-264

Latitude: 18° 39' 31.73"

Longitude: 98° 48' 41.75"

Location: Southwest of Las Lomas and east of Atotonilco, directly alongside the Zacualpan-Axochiapan highway.

Natural setting: The site's topographic zone is Flat Plains, and the vegetation zone is Huizache Grassland. Elevation is 1,300 m. The site is on an impermanent drainage, 540 m east of the closest permanent water source, the Río Frío.

Modern utilization: Maize and bean agriculture is practiced during the rainy season, the fields being prepared with oxen.

*Late Formative Occupation:* Archaeological remains: This is largely a Late Formative occupation site. Material is scattered across 1.25 ha in fairly high densities. Clusters of ceramics, chipped and ground stone artifacts, fire-cracked rock, and stone construction material were found associated in the central portion of the site. Both plain and decorated ceramics were recovered. Six platform mounds were located and mapped. The

site may be larger than our site classification indicates.

Classification: Hamlet.

*Other Occupations:* Terminal Formative Isolated Residence (Hirth 1980), Late Postclassic Isolated Residence.

# RAS-266 (Atotonilco)

Latitude: 18° 39' 6.68"

Longitude: 98° 49' 43.42"

Location: In the modern village of Atotonilco.

Natural setting: This site lies on the lower slopes of a hillside overlooking a spring at the 1,300 m contour interval. The vegetation zone is Huizache Grassland and the topographic zone is Hills. The Río Frío lies 1.2 km to the east.

Modern utilization: The upper slopes and terraces are fallow and overlook the modern village. The lower portion of the site, around the spring, is now covered by a swimming pool complex and its facilities.

*Early Formative Occupation:* Archaeological remains: A few Amate phase sherds were found at the spring by Grove (personal communication). Two figurine heads were located on the slopes above the resort.

Classification: Isolated Residence.

*Middle Formative Occupation:* Archaeological remains: Estimation of site boundaries was impeded by the spread of the *balneario* facilities and was accomplished only insofar as there were field observations and reports to warrant them. The upper hillside boundaries could be found, and the lower boundaries were set directly to the south of the *balneario* springs. Middle Formative, Classic, and Tlachuica (Postclassic) materials are recorded from the installation excavations carried out when the facility was built (Grove 1968b:278). The obtained figure for site extent is 6 ha, which is probably too small.

Classification: Barranca phase Hamlet, Cantera phase Hamlet.

*Other Occupations:* Classic Isolated Residence (Hirth 1980), Late Postclassic Regional Center.

# RAS-271

Latitude: 18° 37' 40.08"

Longitude: 98° 50' 1.67"

Location: North of Tepalcingo, 100 m west of the Atotonilco-Tepalcingo highway.

Natural setting: This site is located between the 1,150 and 1,200 m contour intervals. The vegetation zone is Huizache

Grassland, and the topographic zone is Flat Plains. The site is 990 m west of the Río Frío and 665 m east of an impermanent drainage. The soil varies in depth from 0.75 to 1 m.

Modern utilization: The site is located within a modern irrigation system. At the time of the survey it was planted in tomatoes, and slightly to the south cotton was growing. The soil is prepared by tractor plowing.

*Middle Formative Occupation:* Archaeological remains: Only a trace of Middle Formative material was found. There were no heavy buildups of surface rubble to suggest large-scale permanent residence. This is a single-component site.

Classification: Cantera phase Isolated Residence.

# RAS-292

Latitude: 18° 45' 6.68"

Longitude: 98° 47' 6.68"

Location: In irrigated plots near the town of Huazulco.

Natural setting: This site is located in the northern Pithecellobium Woodland vegetation zone and the Flat Plains topographic zone. Site elevation is 1,475 m. The closest source of permanent water is the Río Amatzinac, more than 1 km away.

Modern utilization: The area is completely irrigated and planted in peanuts. Field preparation is with oxen.

*Late Formative Occupation:* Archaeological remains: A light trace of Late Formative material was found. There was no indication of any permanent architecture. This is a single-component site.

Classification: Isolated Residence.

# RAS-295

Latitude: 18° 45' 38.41"

Longitude: 98° 47' 0"

Location: Northwest of the town of Huazulco.

Natural setting: This site is in the northern Pithecellobium Woodland zone. It is 150 m from an impermanent drainage and over 600 m from the nearest source of permanent water. Site elevation is 1,500 m. The topographic zone is Flat Plains.

Modern utilization: The whole site area is irrigated, and peanuts were growing at the time of the survey. Field preparation is with oxen.

*Late Formative Occupation:* Archaeological remains: A light scatter of material was encountered. There were no indications of residential structures.



Classification: Isolated Residence.

*Other Occupations:* Terminal Formative Isolated Residence, Classic Isolated Residence (Hirth 1980), Late Postclassic Isolated Residence.

#### **RAS-318**

Latitude: 18° 40' 35.07"

Longitude: 98° 47' 18.37"

Location: Due south of the ex-hacienda Santa Clara east-southeast of Jonacatepec.

Natural setting: This site is located directly below the 1,350 m contour interval at the base of two flanking hills, a situation which could be termed a pocket valley. The topographical zone is Irregular Plains, Slight Relief, and the site has access to the Pithecellobium Woodland, River Bottomland, and Interior Valley Cerros vegetation zones. It is 2.20 km west of the Río Amatzinac and 475 m from an impermanent drainage.

Modern utilization: Half of the site is permanently fallow, while the other half is a rainfall-watered maize field.

*Middle Formative Occupation:* Archaeological remains: There is a slight scatter of Cantera phase materials over the site. Rubble from residential architecture and a good selection of ground and chipped stone artifacts were noted. Two areas of unusually dense debris may represent former residences.

Classification: Cantera phase Isolated Residence.

*Other Occupations:* Early Postclassic Isolated Residence, Late Postclassic Hamlet.

#### **RAS-326**

Latitude: 18° 41' 16.7"

Longitude: 98° 46' 23.38"

Location: In house plots in the northeastern part of the modern village of Chalcatzingo.

Natural setting: The site is located 300 m east of the Río Amatzinac, in the Flat Plains topographic zone between the 1,350 and 1,400 m contour intervals. It is in the Pithecellobium Woodland vegetation zone and borders on the Barranca zone.

Modern utilization: Part of the area is fallow; the rest consists of house and garden plots cultivated using oxen.

*Middle Formative Occupation:* Archaeological remains: The site consists of a simple ceramic dispersion across the house plots on the northeast part of the village of Chalcatzingo. An area of 3.5 ha was calculated for site extent, although this might be underestimated. Collec-

tions were made in the house plots, and well digging has turned up a good selection of Barranca and Cantera phase material. Several small jade beads and ground stone artifacts were also found.

Classification: Barranca phase Hamlet, Cantera phase Hamlet.

*Other Occupation:* Late Postclassic Hamlet (Hirth 1980).

#### **RAS-328**

Latitude: 18° 41' 5.01"

Longitude: 98° 46' 16.7"

Location: Southeast of the modern village of Chalcatzingo.

Natural setting: The site is located in the Pithecellobium Woodland zone, and the topographic zone is Flat Plains. Elevation is 1,375 m. Easy access to the barranca zone resources is found along the Río Amatzinac 200 m to the east. The soil is sandy, and erosion is slight.

Modern utilization: Rainfall cultivation of maize, beans, squash, and peanuts is practiced. The field is plowed using oxen. This site was used to test the effects of seasonal rainfall and field preparation on the amount of recordable surface debris (Hirth 1978c).

*Middle Formative Occupation:* Archaeological remains: A thin Middle Formative ceramic scatter was found over 2.50 ha. The fields had been cleaned of most stone rubble.

Classification: Barranca phase Isolated Residence, Cantera phase Hamlet.

*Late Formative Occupation:* Archaeological remains: A light scatter of Late Formative ceramics was found across a little over 1 ha. No architectural structures were associated.

Classification: Isolated Residence.

*Other Occupations:* Early Classic Hamlet (Hirth 1978c; 1980), Late Postclassic Isolated Residence.

#### **RAS-330 (Chalcatzingo)**

Latitude: 18° 40' 41.75"

Longitude: 98° 46' 10.02"

Location and natural setting: See Chapter 2.

Modern utilization: See Chapter 26.

Archaeological remains: See Chapters 4–20, 24.

Classification: Amate phase Small Village, Barranca phase Small Village, Cantera phase Regional Center, Late Formative Small Village, Terminal Formative Small Village, Early Classic Small Village, Late Classic Small Village (Hirth 1980), Postclassic shrine.