The 2001 field season of the Xibun Archaeological Research Project (XARP) extended from February through April. The project takes its name from the colonial mission called Xibun, although today the River and surrounding karst are spelled Sibun. Field research took place in the Sibun River Valley of central Belize between the base of the Gorge and the beginning of the estuarine environment (a length of about 60 km as the crow flies). Selected locales for research included surface residential and ceremonial centers, underground caverns, and oxbows and physiographic features (such as river terraces and meander bends) pertinent to paleo-environmental research. The length of the valley was sampled via five transects that crosscut the valley, the first beginning at the base of the Sibun Gorge (Figure 1.1). During prior seasons (1997 and 1999), survey, excavation, and cave mapping/surface collection had been undertaken within Transects 3 and 5. Throughout the 2001 season, research focused on Transects 1, 3, 4, and 5.

During the month of February, the seminal research undertaken by XARP within Transect 1 was initiated. Located within a pocket of fertile farm land at the base of the Gorge, Transect 1 yielded a diversity of archaeological remains, most attributable to the Classic period. Several small sites such as Echo Valley, Sleeping Giant, Silver Creek, Finca Buenos Aires, and St. Thomas were located via GPS, reconnoitered, and mapped (see Morandi et al., Chapter 2). While most sites possessed a small grouping of Classic Maya platforms, St. Thomas did not. Rather, an Archaic period Lowe projectile point was discovered on the surface at St. Thomas (see Morandi et al., Chapter 2 and Finamore, Chapter 8). Using a Total Station, a topographic map was completed of the 0.75 km² Hershey site, the largest settlement in the valley complete with an 11 m tall pyramid (see Map Sheet 1). Three test excavations were placed at the Hershey site (see Harrison, Chapters 5 – 6 and Acone, Chapter 7). Historical archaeologist Daniel Finamore reconnoitered the area for the remains of the Colonial visita (see Finamore, Chapter 8). Although this survey yielded negative results, the search will continue in the lower part of the valley. The largest cave discovered to date in the Sibun environs—Actun Chanona—was investigated, mapped, and its surface collected (see Peterson, Chapter 3 and Cobb, Chapter 4).

For the months of March and April, the camp was moved to the lower valley so that Transects 3, 4, and 5 could be investigated. Since the eastern edge of the cave-containing karst is coincident with the eastern edge of Transect 4, no cave studies could be undertaken within Transect 5. Cave mapping and artifact collection continued in the Tiger Bay Cave District of Transect 3 (Usrey Cave) and was initiated within the caves of the Gracy Rock Cave District (Transect 4), most notably Arch Cave (see Peterson, Chapter 9). Surface reconnaissance, survey, and mapping were undertaken within Transect 4 and resulted in the recording of four settlement sites: Juana Pond, Butcher Bank, Freshwater Creek, and Cedar Bank (the final being a site already noted in the DOA site archives). Locations were determined via GPS and sites were mapped with a tape, compass, and laser range-finder (see Buck and Thomas, Chapter 13).
At the residential site of Pakal Na, a large burial pit had been encountered at the end of the 1999 season. This unit was re-opened in 2001 and the skeletal remains of one headless male, two bundle burials, and associated funerary objects were excavated (see Harrison and Acone, Chapter 10). Two additional excavation units were opened at Pakal Na: one at the locale of a subsurface anomaly detected by magnetometry (see Welch, Chapter 12) and the other at a partially bulldozed structure (see Morandi, Chapter 11). A 2 × 2 m excavation at the base of a large mound at Cedar Bank yielded early Colonial material (see Morandi, Chapter 14) while excavations conducted at the Augustine Obispo site yielded an abundance of Postclassic censors (see Morandi, Chapter 15). Finally, investigation of a small stone mound at the Samuel Oshon site yielded definitive evidence of a circular shrine structure, the second documented in the Sibun Valley (see Harrison, Chapter 16).

Figure 1.1 Sibun Valley showing transects and selected archaeological sites.
Under the direction of John Jones, three pollen cores were extracted from oxbows in the middle and lower sections of the valley. Oxbows were associated with the archaeological sites of Pechtun Ha, Pakal Na, and Samuel Oshon (see Jones, Chapter 34). Soils geographer Pat Farrell, assisted by Rhiannon Jones, collected samples from selected locales in the upper, middle, and lower parts of the valley in order to reconstruct the ancient soil mantle of the valley (see Farrell, Chapter 32 and Jones, Chapter 33). Geomorphologist Tom Bullard initiated study of the fluvial hydrology of the Sibun River (see Bullard, Chapter 31). Finally, botanist Kirsten Tripplett collected specimens of modern cacao as well as other species of the modern vegetation community (see Tripplett, Chapter 35). Tripplett, assisted by Emily Hall, initiated a water-flotation system for sieving bulk samples from excavations for retrieval of archaeo-botanical remains (see Hall, Chapter 30).

Piecing Together a Narrative of the Xibun Maya

As archaeological research in the Sibun Valley continues, a narrative of the Xibun Maya has begun to unfurl. The raw field data from each field season (1997, 1999, and 2001), when combined with subsequent analysis, either reinforce existing notions or lead our interpretations into new directions. Relevant to this iterative process are the major findings of the 2001 season of XARP that can be divided into two categories: archaeological and paleo-environmental. Since the Sibun Valley is an area that was relatively undocumented prior to XARP, the documentation of site locations and the construction of a local chronology of Maya occupation represented primary orders of business. Toward this end, we have established that there are two large anchor sites situated within the upper and lower valley, Hershey and Oshon, respectively (see Thomas, Marx, and Bermingham, Chapter 17). Hershey appears to be the only site in the valley with pyramidal architecture (Figure 1.2). Excavation at these anchor sites as well as smaller sites within the middle reaches of the valley has yielded evidence of construction techniques that incorporated local materials (see King, Chapter 18) and often constituted only one to three construction phases.

Toward the establishment of an absolute chronology, we have collected more than 100 charcoal samples for radio-carbon dating (many of which are currently undergoing analysis at the University of Arizona AMS lab). We have also made significant progress toward a relative chronology based on ongoing pottery analysis by ceramicist Sandra L. López Varela (see López Varela, Chapter 20). Xibun pottery represents a combination of extraordinarily well preserved sherds and complete vessels from caves (see Betzenhauser, Chapter 21) and marginally preserved pottery from excavations at residential sites, many of which are seasonally inundated. As anticipated, the Terminal Classic or Epiclassic period (AD 700-1000) appears to be the most vigorous period of platform construction in the valley and the timeframe of visitation to the nearby caves of the Sibun-Manatee karst as well as the Hummingbird karst. A time of great upheaval in ancient Maya society, the Epiclassic is the period during which sites in northern Yucatan—such as Chichén Itzá—rose to prominence. The link between sites of the Sibun Valley and northern sites is strengthened by the presence of northern pottery such as Chichén redwares in the Sibun Valley as well as the local construction of circular structures (now documented at the sites of Pechtun Ha and Samuel Oshon). Such shrine structures are a hallmark of the Epiclassic period throughout the Maya lowlands.

The cave of Actun Chanona. Located at the base of the Gorge and in proximity to the Hershey site, is thus far the only cave in the valley known to contain human remains (see
Hauksdottir and Morandi, Chapter 26). Since it is also the largest documented cave in the valley, the presence of skeletal material may refer to the fact that qualitatively different rituals were undertaken at this locale. The profound impact of the nearby caverns on the ritual life of the residents of the valley cannot be under-estimated and is materialized in the presence of speleothems transported to valley settlements (see Parks, Chapter 19) and, conversely, faunal offerings brought into the caves (see Leonard, Chapter 28).

Figure 1.2 Three-dimensional contour map of the Hershey site.

Preliminary analysis of pollen from cores extracted from oxbow features indicates a dearth of pollen from economic species (see Jones, Chapter 34). The premise that ancient cacao cultivation was practiced in the Sibun Valley is supported by these results since cacao itself leaves behind scant pollen but thrives as a lower-story arboreal species in a tropic forest. Successful cacao farmers of the past would not have leveled the bush in the manner that pollen analyses conducted on cores from the central Peten of Guatemala has suggested. The prevalence of large game in the midden deposits of relatively modest architecture is another indicator that high bush rain forest likely existed nearby.
during the population maximum (see Stanchly, Chapter 27). Another line of support for cacao production is provided by documentation of another possible cacao-drying platform—manifest as a highly fired clay surface—at the site of Pakal Na (see Welch, Chapter 12). The high frequency of imported goods, such as obsidian (see Lim and Thomas, Chapter 24) provides yet another indicator that the residents of the Sibun Valley brought something of value to trading transactions.

While we do not know exactly what commodity was traded out of the valley, we do have evidence that fish from the offshore coral reef were brought up river, presumably through trade, all the way to the base of the Gorge (see Stanchly, Chapter 27 and Kavountzis, Chapter 29). The daily life of Xibun Maya residents also involved acquiring suitable hard stone for chipped and groundstone tools (see Abercrombie, Chapter 22; Cesario, Chapter 23; and Haggar, Chapter 25). For Xibun Maya living close to the Caribbean (Transect 5), sources of medium-quality chert formed by marine transgressions of past geological epochs were readily available. Used as ballast in construction fill at the Augustine Obispo and Samuel Oshon sites, chert debitage is dramatically over-represented at Transect 5 sites in comparison to sites up river (see Cesario, Chapter 23).

While future field seasons undoubtedly will result in the revision and refinement of the Xibun narrative, the basic construction blocks are in place. Settlements and caves of the Sibun Valley, while peripheral to the powerful Maya cities of the Classic, Epi-classic, Postclassic, and Colonial worlds, contain vital information relevant to understanding major periods of transformation in Maya society. The crisp nature of the deposits in the Sibun Valley, in fact, can be attributed to the lack of severe “over-printing” caused by continued dense occupation or re-occupation. Strategic in the sense of being a locale where a desired prestige good such as cacao could be grown and advantageously situated relative to the Caribbean sea lanes so thoroughly traveled at the end of the Classic period, the Sibun Valley—and its severe flooding regime—posed a challenge to settlers. Perhaps this challenge was mitigated by the miles of nearby underground caverns available for ritual negotiations conducted by watchful farmers. These two facts of nature—floods and caves—shaped the lives of Xibun Maya residents and, in the case of the caves, were shaped by Xibun Maya ritualists. In this manner, culture begets landscape.