The Site of Noh K'uh, Chiapas, Mexico: A Late Preclassic Settlement in the Mensäbäk Basin

Santiago Juarez, Sebastián Salgado-Flores, and Christopher Hernández

In this report we introduce the site of Noh K'uh, a Late Preclassic (400 BC–AD 250) community in the western frontier of the Maya Lowlands. This new body of data contributes to the study of how complex societies emerged both within the Usumacinta River region and the Maya area overall.

Key Words: Late Preclassic, Noh K'uh, settlement

En este informe se presenta el sitio de Noh K'uh, una comunidad del Preclásico tardío (400 aC-250 dC), localizado en la frontera occidental de las tierras bajas mayas. Ofrecemos nuevos datos para el estudio de sociedades complejas tanto en la región del río Usumacinta como en el área maya en general.

Palabras clave: Preclásico tardío, Noh K'uh, asentamiento

re introduce the recently documented Late Preclassic (400 BC-AD 250) site of Noh K'uh (17°06'N, 91°36' W), near the Usumacinta River region of Chiapas, Mexico (Figure 1). Population growth and an increase in complexity was thought to be a gradual process, in which the village societies of the Preclassic developed into Classic period (250-900 AD) cities such as Yaxchilan and Piedras Negras (Houston et al. 2003). Noh K'uh developed away from trade and travel routes along the Usumacinta River (Golden et al. 2008, 2012) in what is referred to as a peripheral zone (López Bravo 2005; Lowe and Agrinier 1960). Here, we will describe a 200 ha site with a monumental core and an estimated 400 structures, which reached its peak construction phase between 395 and 1 BC. Research at Noh K'uh highlights the variation in the rise of social complexity, showing

how different sites waxed and waned at variable times and rates across the region surrounding the Usumacinta.

Research on Preclassic occupations within and near the Usumacinta River Basin has revealed scattered villages and diminutive ceremonial centers. For example, Houston and colleagues (2003:222) describe the region around Piedras Negras as a small-scale "village society" that constructed public (not monumental) platforms. However, the ubiquity of Preclassic materials, along with large-scale land modification, suggests the presence of a larger population within the Usumacinta Region. The sites of Yaxchilan, Piedras Negras (Houston et al. 2003), El Cayo (Lee and Hayden 1988), El Kinel, La Técnica (Scherer et al. 2006), and Zancudero (Arroyave et al. 2006) are characterized by large earthen and stone construction works

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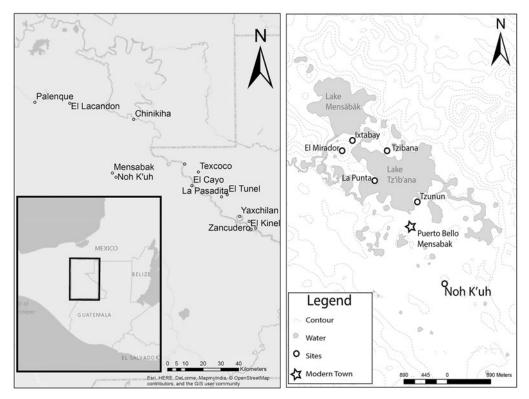


Figure 1. Location of Noh K'uh in Chiapas, Mexico. Left: Map of the Preclassic region. Right: Map of the intermontane Mensäbäk Basin.

associated with small habitations. Similarly, several sites within and near Palenque contain small concentrations of Preclassic material underneath Classic period remains (López Bravo 2005).

Noh K'uh is located 30 km west of the Usumacinta in what others have referred to as a "peripheral zone" due to the distance of the area from Classic period (AD 250-900) sites that followed the riverine trade route (López Bravo 2005; Lowe and Agrinier 1960). Noh K'uh was also in close vicinity to societies in the southern Pacific coast of Mexico and Guatemala (Clark 1981; Kappelman 2004; Lesure 1997; Love 2011; Rosenswig 2012; Rosenswig and Mendelsohn 2016), and Chiapa de Corzo (Clark and Pye 2011; Dixon 1959). According to Inomata (2017:216), central Chiapas and the Pacific coast of Mexico may have inspired the spatial plan of many Preclassic Maya sites. Noh K'uh is found within the boundaries of the Isthmian sphere (see Inomata 2017) and the Maya Lowlands.

Methods

The authors conducted archaeological surveys of Noh K'uh between 2010 and 2013, combining opportunistic and systematic survey techniques (Figure 2). *Opportunistic methods* is defined here as a set of survey methods that worked in tandem with modern Lacandon agricultural practices that clear plots of land through slash-and-burn methods (i.e., swidden agriculture). Transect cutting methods were systematic, maintaining lines of sight 700 m long, with a 100 m long traverse line set every 50 m. In all cases, we used a combination of handheld GPS units, laser theodolite, Brunton compass, and handheld data collectors to record findings.

Twenty-nine $2 \times 2 \text{ m}$ test-pit excavations located at the center and the northern, eastern, and southern edges of the site revealed Late Preclassic materials, with minor evidence of Postclassic (AD 950–1539) intrusions (Salgado-Flores 2011). Test-pits were excavated in 10 cm arbitrary levels. To date, no evidence of Classic period REPORT

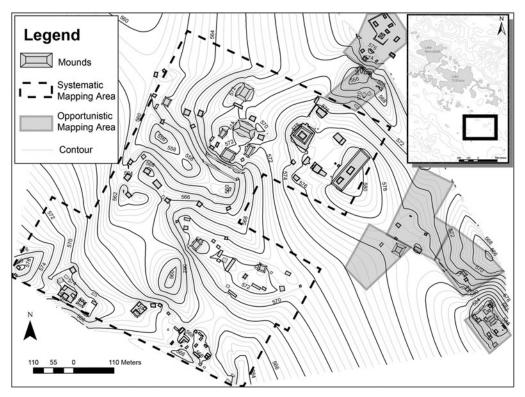


Figure 2. All known structures at Noh K'uh.

materials has been identified within Noh K'uh. Carbon samples collected from architectural context and middens (Table 1) suggest that the site reached its peak construction phase towards the early half of the Late Preclassic (400 BC–AD 250), between 395 and 1 BC.

Findings

Noh K'uh had an aggregated but low-density settlement pattern, with earthen and stone plaza

areas and an open-air ceremonial center referred to as an E-Group (see Freidel et al. 2017). We recorded 10 large ceremonial constructions (superstructures not counted separately) and 118 mound structures within a survey area measuring 50 ha (Figure 2). Mounds were defined as round or elongated formations of earth, rock, and debris that appeared artificial in their construction. Basal platforms that supported these mounds are not included in this count, as their size and extent were not clear from surface

Table 1. Absolute Dates from Excavations in 2011. Processed by the Arizona Accelerator Mass Spectrometry Laboratory.

| Lab No. | Radiocarbon Age BP | $\delta \ ^{13}$ | Calibrated 2 Sigma | Provenience | Context |
|---|---|------------------|--------------------|-------------|---------------------|
| 1. X22649A carbon | 2128 ± 37 2193 ± 37 2186 ± 37 2098 ± 37 2079 ± 36 2103 ± 36 | -25.5 | 352 BC-47 BC | NK2A3:148 | Post Hole |
| 2. X22650A carbon | | -23.6 | 378 BC-171 BC | NK2A3:152.5 | Burned Soil and Ash |
| 3. X22651 carbon | | -29.1 | 379 BC-121 BC | NK2A3:172 | Burned Soil and Ash |
| 4. X22652A carbon | | -24.6 | 343 BC-3 BC | NK2A3:198 | Architectural Fill |
| 5. X22656 carbon | | -26.1 | 195 BC-1 BC | NK2C6:83 | Midden Bottom |
| 6. X22658A carbon | | -25.9 | 344 BC-40 BC | NK2D3:76 | Midden |
| 7. X22659 carbon 8. X22660 carbon 9. X22661A carbon | 2150 ± 36 | -24.9 | 358 BC–56 BC | NK2C11:57 | Midden |
| | 2309 ± 37 | -23.8 | 482 BC–209 BC | NK2C10:110 | Architectural Fill |
| | 2250 ± 37 | -26.6 | 395 BC–205 BC | NK2D4:72.5 | Midden |

reconnaissance alone. Based on exploratory field walking, and the information from our interlocutors, we estimate that 25% of Noh K'uh has been recorded in our current map, and that the site covers an area of 200 ha, containing approximately 400 structures. We emphasize caution with this rough estimate, because little is known about the unmapped structures. Furthermore, our data indicate that constructions were diverse in form and size, suggesting that not all mounds were habitations.

In 2010, a survey team mapped the site's tallest pyramids, revealing the E-Group (Palka 2010; Salgado-Flores 2011), which was characterized by a plaza that includes the combination of an elongated and rectangular structure, oriented to a taller, square-based pyramid (Blom 1924; Ricketson and Ricketson 1937). In most cases, the elongated mound is located on the eastern end of the plaza, whereas the taller pyramid is found on the western side (Chase and Chase 1995:93; Doyle 2012:358). The mapping concentrated in the area located directly southeast of the site's largest construction, a 20 m tall mound (Structure M13) within Noh K'uh's ceremonial core (Figure 3). In the southern corner of the plaza, a large, smooth stone is a remnant of a stone altar or uncarved stelae (Es 1; Figure 3).

Noh K'uh's E-Group orientation and layout demonstrates a confluence of traditions when contextualized within the broader Preclassic region. "Isthmian sphere" E-Groups in the Gulf Coast and Central Chiapas were part of larger processional spaces arranged on a north-south alignment, whereas Maya E-Groups tended to an east-west alignment (Inomata follow 2017:217). Noh K'uh's E-Group is not part of a larger processional space, which is a pattern typical of the Maya (Sullivan 2016). Yet, the E-Group does not follow an east-west alignment. At Noh K'uh the plaza follows a southeastnorthwest axis at almost 135 degrees southeast, which matches the orientation of the surrounding basin. The center of the plaza is equidistant from several mountain tops, including mountain ridge tops to the northeast and southwest, placing the plaza of the E-Group almost perfectly in the center of this basin (Juarez 2017). This orientation indicates that the site was constructed in reverence of the natural landscape, which Inomata (2017:217) states was typical of the Isthmian sphere and demonstrates how Noh K'uh emerged out of traditions found within and outside of the Maya region. Estrada-Belli (2017:305–307) similarly finds landscapefocused orientations in the region surrounding Cival, illustrating that Noh K'uh was not alone in this practice. The east-west relationship is common in E-Groups (Aimers and Rice 2006:79; Estrada-Belli 2011:67), but orientations vary across the Maya lowlands (Aveni and Dowd 2017; Chase et al. 2017:15; Estrada-Belli 2017).

Beyond the ceremonial core, the residences of Noh K'uh are equally complex with smaller ceremonial areas, many of which follow the orientation of the E-Group (Juarez 2017:93). Some combinations of tall mounds and elongated structures resemble separate, but smaller E-Group formations (Figure 3). Similar patterns existed in Cival (Estrada-Belli 2011:68; 2017:295). It is common to have a dozen or more mounds congregated on the same hill, and each are oriented at right angles of each other. Denser concentrations and larger mounds tend to be located along the tops of low-rising hills and include the construction of earthen platforms that can range anywhere between 20 and 100 m in length and width. In all cases, the aggregation of house-mounds appears to have had a substantial impact on the environment, as the outdoor spaces between mounds was artificially flattened (Juarez 2017). All hills associated with domestic structures have demonstrated signs of modification through terracing, infilling, and ancient excavation.

Conclusions and Discussion

Noh K'uh adds to an increasingly complex image of the Preclassic past, where the process of expansion and abandonment may have been interlinked. When small communities along the Usumacinta initiated Early Classic (AD 250– 550) expansion towards large-scale polities, such as Yaxchilan, Piedras Negras, and Palenque, other important centers like Noh K'uh were abandoned by the end of the Late Preclassic Period. At the broader level of the Maya region,

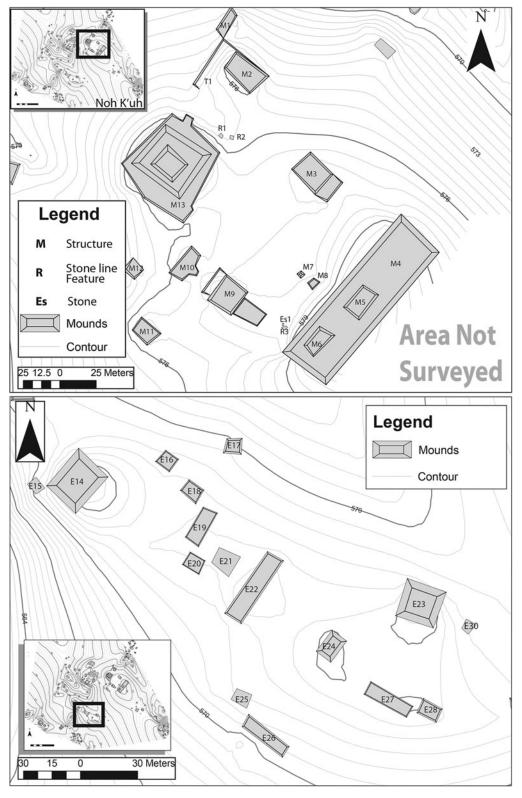


Figure 3. Top: Ceremonial E-Group complex. Bottom: Elongated structures and associated mounds.

Noh K'uh's construction pattern also demonstrates influences from multiple Preclassic traditions including the lowland Maya and Isthmian sphere cultures.

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Data Availability Statement. The data presented in this report can be found in informes archived at Mexico's Instituto Nacional de Antropología e Historia (INAH). Copies of all data are available from the same institution and the authors.

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