

SURVEY AND TRENCHING IN THE FINCAS OF CASTRILLO AND MANDELA

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RESUMEN

Este artículo describe acciones de reconocimiento y excavación dentro de dos propiedades colindantes, Finca Castrillo y Finca Mandela, durante las temporadas 2002 y 2003. La meta de estas acciones fue localizar y confirmar senderos prehistóricos y sitios conectados por ellos dentro del área del proyecto, mediante la combinación de datos generados por percepción remota y excavación de trincheras. En la primera parte de este informe se discuten varios sitios prehistóricos e históricos descubiertos en los reconocimientos pedestres. Los sitios prehistóricos incluyen lo que muy probablemente son cementerios de la fase Arenal que han sido huaqueados en diferentes grados, además de dos petroglifos y lo que podría ser una aldea. Los sitios históricos son dos hornos de antigüedad no determinada. En la segunda parte de este informe se discuten los senderos prehistóricos encontrados cerca de los sitios, y la relación entre senderos y sitios.

ABSTRACT

This article describes survey and excavation activities within two adjoining fincas, Finca de Castrillo and Finca Mandela, during the 2002 and 2003 field seasons. The goal of these activities was to locate and confirm both prehistoric footpaths and the sites they connected within the project area using a combination of remote sensing data and trenching. The first part of this report discusses several prehistoric and historic sites encountered on pedestrian survey. The prehistoric sites include what are most likely Arenal phase cemeteries that have been looted to various degrees, two petroglyphs, and perhaps a village. The historic sites are ovens (hornos) of indeterminate age. The second part of this report discusses the prehistoric footpaths found as a result of continued survey near these sites and their relationship to them.

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The detection and confirmation of Precolumbian footpaths have been difficult in the section of the Proyecto Prehistorico Arenal study area to the south and west of Tilarán due to the pronounced and prolonged human impact on the landscape during the late 19th and 20th centuries, which included forest clearing, construction of roads and buildings, sugar cane production, plowing, and cattle grazing. Additionally, the nature of the local topography-gently rolling hills with negligible erosional potential, the nature of footpaths-makes detection challenging. However, it was during the course of conducting pedestrian surveys in this problematic region that we encountered a high concentration of archaeological sites spread across two adjacent fincas, the majority of which appear to be cemeteries that date to the Arenal phase. The first two cemeteries were discovered by project researchers on Lic. Francisco Castrillo's finca while the remainder of the sites discussed in this report are contained within Finca Mandela. The sites located on the latter holding were found with the invaluable aid of the now retired finca mandador, Luis Angél Calvo Brenes, who continues to live on the land with his family. Sr. Calvo Brenes has worked on Finca Mandela for over 35 years and appears to know the land better than anyone. We are reasonably sure that we now have a fairly complete catalog of visible sites from this finca based on two excursions and several interviews with Sr. Calvo Brenes.

Investigation of these archaeological sites was warranted for several reasons, even though no confirmed, intact Precolumbian footpath had been located near them prior to our 2003 research. First, the Arenal phase footpath confirmed in imagery and by trenching during the 2002 season is directly east of the site concentration and a reasonable extrapolation of the path's continuance to the west would bring it very near the sites. This suggests a potential direct relationship between the sites and the footpath across a large prehistoric landscape, one that should be studied in detail. Second, by studying a sample of the largely well-preserved cemeteries, we can build a stronger understanding of both variability and consistency in funerary and post-funerary ritual during the Arenal phase. This type of investigation would greatly expand current knowledge of Arenal phase mortuary practices in this region, most of which comes from work at the late Arenal phase village and cemetery site of Sitio Bolívar along the current shoreline of Lago de Arenal (Hoopes & Chenault, 1994). Third, it is a more general goal of this project to better understand all of the prehistory for this region-beyond the Silencio phase sites and footpaths-in order to put past, present, and future archaeological research there into its proper context. After a brief description of the sites found on survey in 2002 and the footpaths related to these sites that were found on survey in 2003, the significance of the findings will be discussed.

SURVEY IN FINCAS OF CASTRILLO AND MANDELA, 2002

The section of the project study area covered in this report is situated to the southwest of Tilarán. It is bounded to the east by the paved road to the town of Quebrada Grande, to the west by the dirt road to the town of Libano, to the north by the prominent ridge that bounds the north slope of Quebrada Lombardía, and to the south by Rio Quebrada Grande. This region is mixture of pastures, cultivated fields, and rain-forest. The sites discussed below are located in all three types of environments with varying degrees of visibility and preservation. Site locations are only generally accurate, as they were done using IKONOS imagery printed for field use, and they could be off by one hundred meters or more. In some cases, the sites are in such dense forest cover that an accurate location was impossible to obtain. To protect these sites from further looting, only finca-level provenience information is provided below. Qualified professionals can obtain more detailed site locational information from the author, the issue editor, or from the Museo Nacional de Costa Rica.

PRECOLUMBIAN SITES

Cemetery 1

Owner: Lic. Francisco Castrillo

Location: Finca de Castrillo

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. It is moderately heavily looted, but there do appear to be some intact tombs remaining (Fig. 1). It is small in size, measuring roughly 15 meters in diameter. Excavations a year after this cemetery was first recorded clearly indicated that the cemetery was more thoroughly looted than it originally appeared (see Weller article below).

Cemetery 2

Owner: Lic. Francisco Castrillo

Location: Finca de Castrillo

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. There is very little evidence of looting. There is also a possible path remnant to the north of the cemetery running east-west. The cemetery is large in size, measuring over 50 meters in diameter. Lic. Castrillo has expressed interest in conservation and protection of this cemetery. Excavations conducted the year after this was discovered and recorded indicated that it was not a formal cemetery, but rather it was a repository of stone for construction in Cemetery 1 (see Weller article below).

Cemetery 3

Owner: Stefano Poma

Location: Finca Mandela

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. It is only slightly looted, and is very small in size (15-20 meters in diameter).

Cemetery 4

Owner: Stefano Poma

Location: Finca Mandela

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. Sr. Calvo Brenes mentioned that a standing stone retaining wall existed around along the lower edge of the cemetery until the 1973 earthquake toppled at least the upper portion. The cemetery is only slightly looted, and is roughly 20-25 meters in diameter.

Cemetery 5

Owner: Stefano Poma

Location: Finca Mandela

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. The central area is heavily looted, but the entire perimeter is unknown. However, the southern edge is roughly 30 meters from the corral and appears to be in good condition.



Fig. 1 Looted tomb at Cemetery 1, the size and morphology of the stones suggest Arenal phase use.

Cemetery 6

Owner: Stefano Poma

Location: Finca Mandela

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. It contains at least two large looter's pits, but most of the cemetery appears to be intact. The cemetery is approximately 20-30 meters in diameter.

Cemetery 7

Owner: Stefano Poma

Location: Finca Mandela

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. It is very small in size (10-15 meters in diameter). The cemetery is also in an unusual location (high up on a hill slope). There is one large looter's trench present.

Cemetery 8

Owner: Stefano Poma

Location: Finca Mandela

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction (Fig. 2). One massive sherd with a very slight curvature was found on the modern ground surface. The sherd is much too big to fit into a tomb and thus may have been involved in post-interment funerary rituals. This cemetery has experienced light to moderate looting and is large in size (it is at least 30 meters in diameter). This cemetery is located at a great distance from the nearest source of river cobbles, which is uncommon and perhaps quite significant.

Cemetery 9 (G-725 PM)

Owner: Stefano Poma

Location: Finca Mandela

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. It is very large (more than 50 meters in diameter), with very little evidence of looting present. As with Cemetery 8, this cemetery is located at a great distance from the nearest source of river cobbles, which is uncommon and perhaps



Fig. 2 Looted tomb in Cemetery 8, one of our workers and Sr. Calvo Brenes are pictured in the background.

quite significant. The year after this cemetery was recorded, we returned and conducted excavations (see Butler article below).

Cemetery 10 (G-504 P)

Owner: Stefano Poma

Location: Finca Mandela

Description: The cemetery is most likely Arenal phase based on the use of river cobbles for tomb construction. It is small in size, measuring roughly 20 meters in diameter. Two reconstructible and two fragmentary vessels (Fig. 3) were recovered (broken during looting activities in the recent past). One massive sherd with a very slight curvature was found on the modern ground surface. The sherd is much too big to fit into a tomb and thus may have been involved in post-interment funerary rituals. One ceramic tripod foot/leg was also found.

Cemetery 11

Owner: Stefano Poma

Location: Finca Mandela

Description: According to Sr. Calvo Brenes, this is one of two completely intact Arenal phase zoned bichrome cemeteries located deep in the dense rainforest on Finca



Fig. 3 One of two reconstructible vessels found in the looted section of Cemetery 10.



Fig. 4 Petroglyph Locus 1 with the two spirals highlighted by green moss.

Mandela. The inaccessibility of this cemetery most likely explains why it has not been looted.

Cemetery 12

Owner: Stefano Poma

Location: Finca Mandela

Description: The second of two intact Arenal phase zoned bichrome cemeteries (see notes on Cemetery 11) located deep in the dense rainforest on Finca Mandela. The inaccessibility of this cemetery most likely explains why it has not been looted.

Petroglyph Locus 1

Owner: Stefano Poma

Location: Finca Mandela.

Description: The locus consists of two spiral petroglyphs on a low-lying rock on the north side of Quebrada Quesera. The larger spiral is approximately 40 cm wide while the smaller spiral is closer to 25 cm wide (see Fig. 4). These petroglyphs could have a similar in function to boundary marker petroglyphs in Panama (see Linares & Ranere, 1980).

Petroglyph Locus 2

Owner: Stefano Poma

Location: Finca Mandela

Description: According to Sr. Calvo Brenes, there is small but well made spiral petroglyph on a rock on the south side of Quebrada Quesera, not far to the west of Petroglyph Locus 1.

"Village 1"

Owner: Stefano Poma

Location: Finca Mandela

Description: The surface collection of a large intact and unweathered pestle very close to a flat area on a north-facing hill slope between Rio Lombardía and Rio Quesera (just to the east of where the two rivers meet on the road to Libano) suggests the presence of a habitation site in the immediate vicinity.

PROBABLE HISTORIC SITES

Horno 1

Owner: Stefano Poma

Location: Finca Mandela

Description: This first oven feature consists of a very large weathered volcanic tuff boulder, into the middle of which was carved a domed chamber with an extremely well prepared level cooking surface. There are two openings to the chamber, each roughly 30 cm in diameter. Each could easily have been created by rotating a machete into the soft tuff. The left opening has a shelf cut into the boulder directly in front of it, also well made. The chamber itself is blackened in several areas and is much harder than the clay-rich weathered tuff due to repeated exposure to high temperature fires. The firing process is the same as firing clay, and repeated use of the oven resulted in a thicker hardened layer. The family that occupied the land near this feature claimed that the oven was there when they arrived and is Precolumbian in age, although the veracity of this claim is doubtful (see notes on Horno 2). Sr. Calvo Brenes indicated that the family's house was only 15 meters away, upslope from the horno. He stated that the family was known for baking their own bread. The family lived in this location before he started as mandador for the finca.

Horno 2

Owner: Stefano Poma

Location: Finca Mandela

Description: This is the second of two oven features that utilized weathered volcanic tuff boulders. This oven also consists of a large, blackened, hardened, domed chamber carved into the rock with a well prepared level cooking surface. The main opening on this oven is roughly 30 cm in diameter. There is also a smaller opening up and to the left of the main one that is 8-10 cm in diameter and most likely served as part of an exhaust system (Fig. 5). This smaller opening is about the same width as a thin machete blade and it is possible that a machete was used to create the smaller opening as well as the entire feature. The family that used Horno 1 in historic times also used Horno 2 and claimed that it, too, was Precolumbian in age. The odds of the same



Fig. 5 *Horno 2, the main opening is just to the right of the author in this picture.*

family finding the only two Pre Columbian rock hornos in the entire area, adjacent to their homes, are slim to none. More likely is that both ovens were constructed by the family. Sr. Calvo Brenes stated that this was the second place where the family lived in this area, and that their house was 400 meters away, downslope along the river.

SURVEY AND TRENCHING IN FINCA MANDELA, 2003

TRENCHES & STRATIGRAPHIC TESTS

The footpath survey for 2003 was centered on the area directly surrounding Sitio Poma (Cemetery 9, G-725 PM), a cemetery dating to approximately AD 500. During the course of excavating the site this season (see Butler article below), Weller and Butler noticed two faint linear anomalies that appeared to be coming into the site from the adjacent hillside to the east. After shovel testing demonstrated the presence of intact Unit 20 in each feature, trenches were dug to confirm/disconfirm the presence of footpaths (Fig. 6). A trench was placed in another depression further upslope and to the east as well. Notes on these trenches can be found below.

Trench 70 - Confirmed Footpath

Date: 07.04.2003. Size: 1 x 6 m. Slope: 23°.

A path was detected in the east wall profile of the trench after testing was extended south. This wall also contained a sherd of Hermanos Beige (~ AD 500) at the north end

that appears to be directly associated with footpath use. The path was worn down into the Aguacate formation and then filled in subsequently with volcanic ash layers (Figs. 7 and 8). Unit 20 is disperse but intact, Unit 30 is well-preserved, and Unit 55 is intermixed with Unit 65 (Aguacate).

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Trench 71 - Confirmed Footpath

Date: 07.07.2003. Size: 1 x 4 m. Slope: 23°.

While there is a distinct depression visible on the surface, a path was not directly detected in the trench profile. However, preservation of volcanic ash layers is excellent just above the feature where it begins to go down a steep slope (Figs 9 and 10). The depression also aligns perfectly with the cemetery at the bottom of the hill. Units 20, 30, 40/41, and 50 were present.

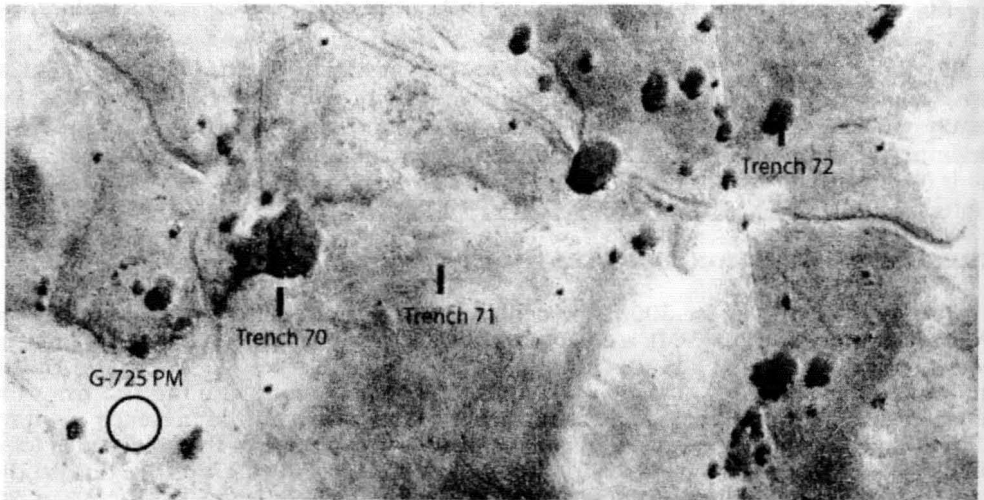


Fig. 6 IKONOS CIR image showing locations for Sitio Poma and Trenches 70-72.

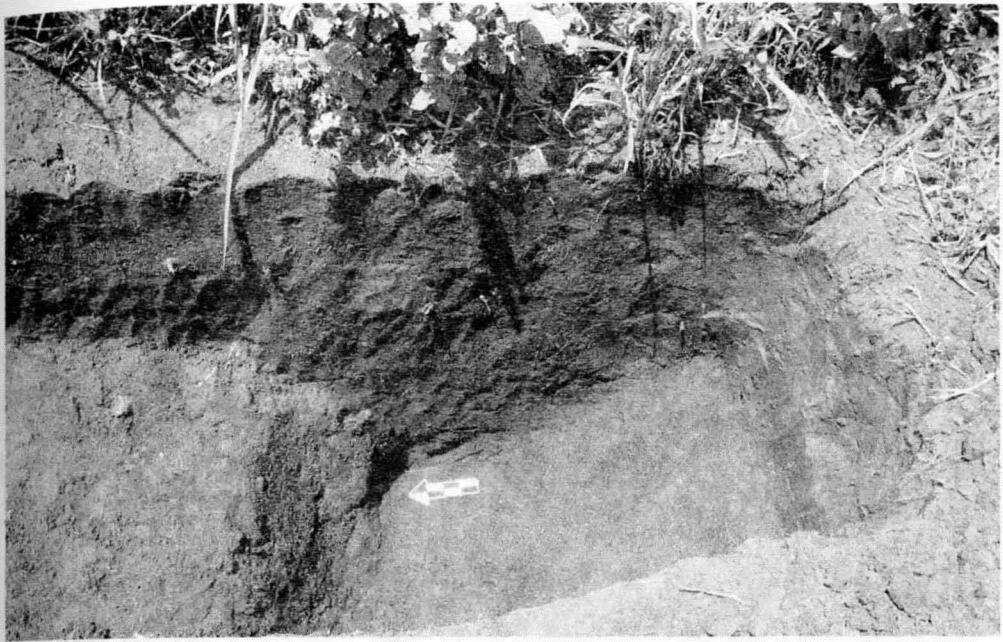


Fig. 7 Prehistoric footpath found in Trench 70.

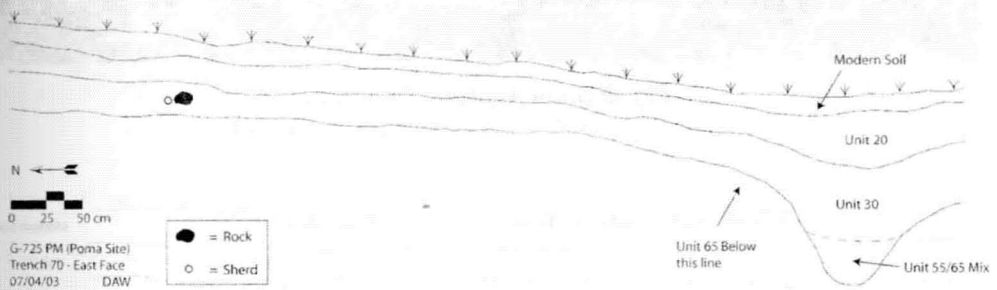


Fig. 8 Profile of Trench 70 showing footpath.

Trench 72 - Confirmed Footpath

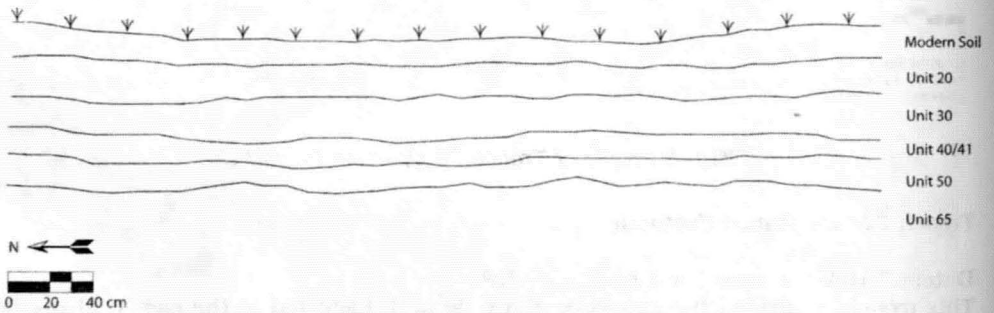
Date: 07.10.2003. Size 1 x 4 m. Slope: 23°.

This trench confirmed the existence of a wide path (detected in the east wall profile), worn down into the Aguacate formation through repeated use (Figs. 11-12). The two confirmed paths that lead to the cemetery appear to join together into this path further upslope. This path is unique in that it takes advantage of a natural depression between two hills. Units 20, 30, 40/41 were well-preserved while Unit 55 was mixed with Unit 65.

Several other linear anomalies in the area, upon shovel testing, did not contain intact Unit 20 and thus were not explored any further. Many of these turned out to be



Fig. 9 Stratigraphy of Trench 71.



G-725 PM (Poma Site)
Trench 71 - East Face
07/07/03 DAW

Fig. 10 Profile of Trench 70

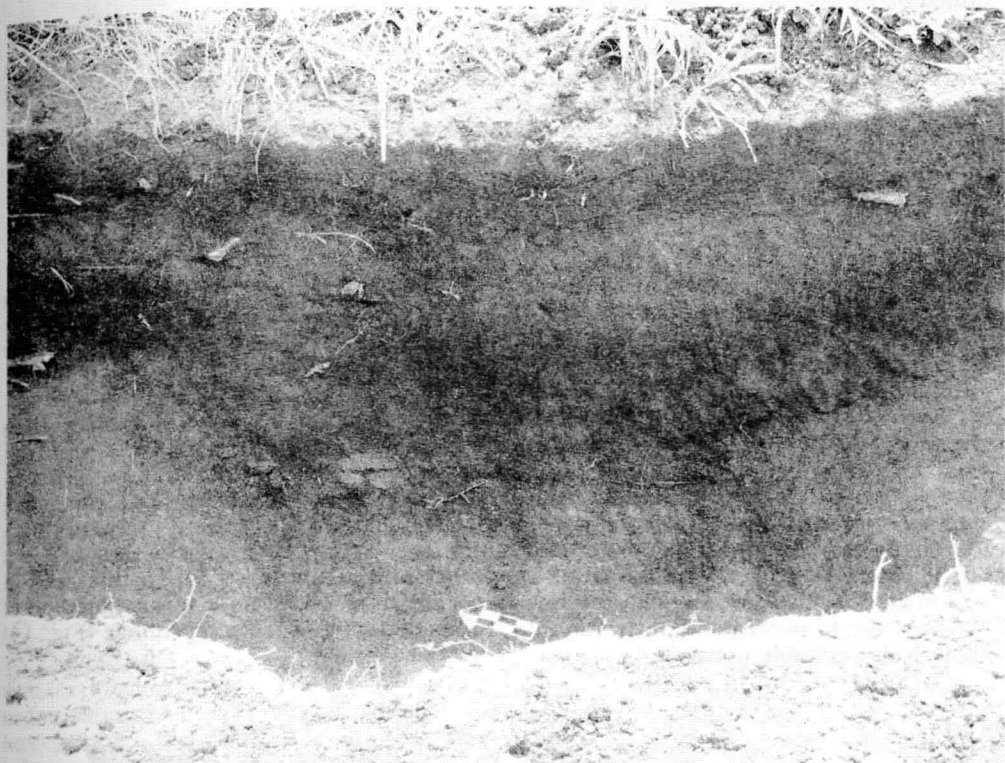


Fig. 11 Prehistoric footpath found in Trench 72.

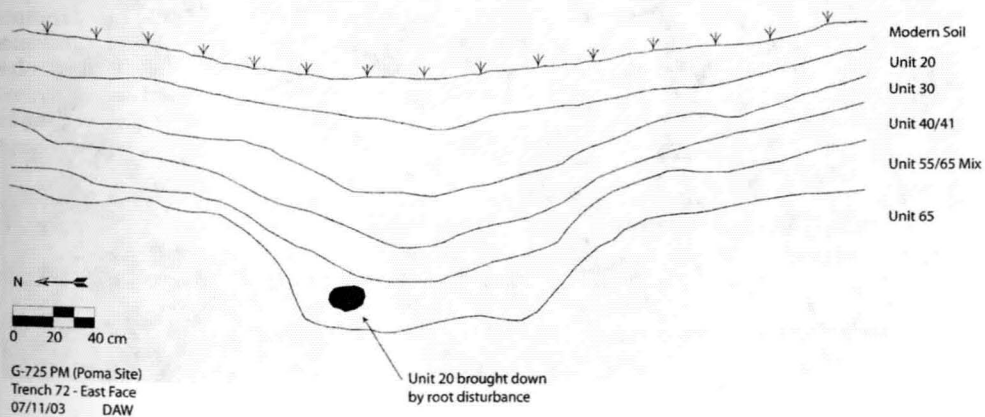


Fig. 12 Profile of trench 72 showing prehistoric footpath.

historic bladed roads, oxcart paths, or were simply eroded down to Aguacate and contained no intact volcanic ash layers.

An attempt was also made to locate the continuation of a Silencio phase footpath that leaves Finca El Silencio and heads towards Lago de Arenal along a ridge oriented with the modern town of Rio Chiquito. After several intense sessions examining available satellite imagery and CIR air photos, shovel testing, stratigraphic cuts, and many days of pedestrian survey, the attempt had to be abandoned. We were not able to confirm any footpath segments beyond those discovered in the 1980s.

DISCUSSION

Trenches 70, 71, and 72 confirmed the presence of no less than three footpaths near Sitio Poma (Cemetery 9). These linear anomalies show up fairly well in a pan-sharpened version of the CIR image for the area (Fig. 13). This begs the question of how all of them relate to each another and to the cemetery to the west.

It became clear from the intact volcanic stratigraphy present in each trench and the sherd of Hermanos Beige pottery found in Trench 70 that all three paths fall into the same time span of use as the cemetery (approximately AD 500, Arenal Phase). This in turn suggests that the three paths form a network. The two parallel paths leaving the cemetery toward the east probably coalesce into the single path leading uphill and farther to the east. The most likely scenario is that of the two western paths the northern one is older and is the termination of the path found further east. When this section was worn down to Aguacate clay on the steeper slope, a second path was created off of the first one to accommodate traffic into the cemetery. The following image (Fig. 14) shows this probable network.

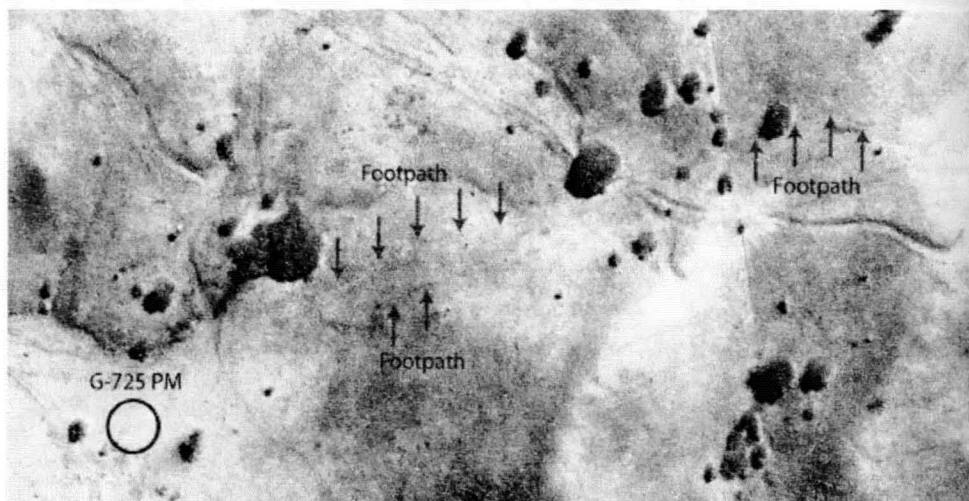


Fig. 13 Pan-sharpened image showing locations of prehistoric footpaths.

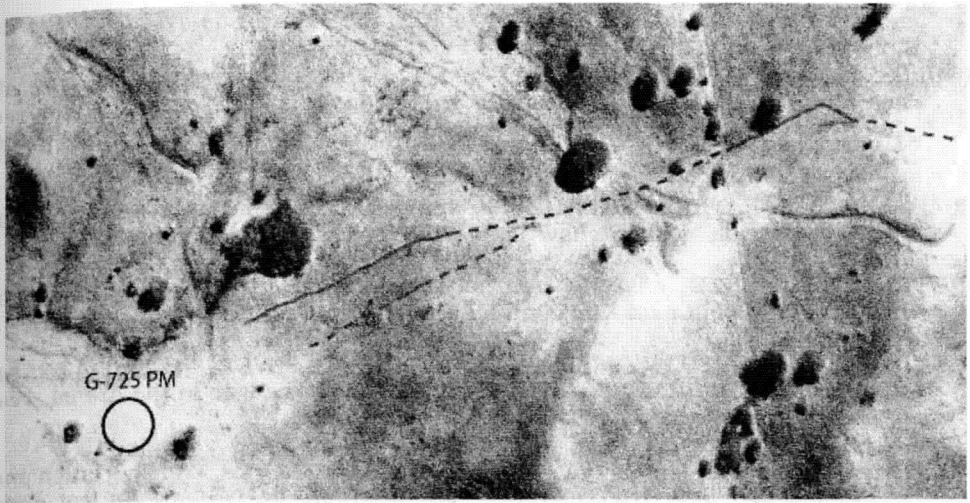


Fig. 14 Probable footpath network near G-725 PM, continuous lines depict confirmed footpath segments while projected segments are depicted in discontinuous lines.

CONCLUSIONS

Establishing patterns of prehistoric regional integration for economic, political, and/or ideological purposes provides archaeologists with a unique window into the organization of middle range societies in a portion of Central America that remains largely unstudied when compared to other regions. Connecting isolated sites to each other as well as to particular resources across space and time is an integral part of the Proyecto Prehistorico Arenal research design. One of the most direct ways to connect sites and resources to one another is to locate the transportation routes indigenous peoples would have used to travel from one place to another. Sheets had successfully demonstrated that prehistoric footpaths, despite local site formation processes, are still detectable on the modern ground surface through the use of remotely sensed data and pedestrian survey (Sheets & McKee, 1994; Sheets *et al.*, 1991; Sheets & Sever, 1991). Excavation of these features, due to the presence of several well-dated volcanic ash layers and occasional artifacts, can establish a general bracketed time period of use for these features.

The 2002 and 2003 Proyecto Prehistorico Arenal site and footpath survey had some interesting, unexpected, sometimes very frustrating results. We were pleasantly surprised to find a network of paths leading directly to, and apparently terminating at, Sitio Poma (Cemetery 9). However, we do not know to what destination the eastern end of the path network goes. We were also unable, despite repeated efforts, to find more of the established the Silencio phase footpath network east of Finca El Silencio.

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