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## Conclusions:

- There was no faunal material found in any of the 187 shovel test pits.
- We assume collection methods are not the reason for the lack of faunal materials because soil samples were water-screened through multiple screen sizes.
- We assume, preservation conditions are not the reason because botanical remains are being preserved.
- It is a normal occurrence in Late Classic contexts in NW Belize (Hageman, et al 2007).
- With no faunal remains, it is still unknown about what types and amounts of animals were consumed at Guijarral.

## Reasons for no faunal Remains:

- Based on ceramics, it is possible that animal remains were not discarded in traditional middens.
- Animals remains could have been used for tools or crushed for medicines.
- Recent ethnographic research found that present-day Maya cache bones ritual offerings, perhaps animal remains were ritually disposed or kept at home (Brown 2005).
- There could be other locations for ancient garbage dumps.
- Do you have any other ideas?

## Future Studies:

- Utilizing wet-screening through nested 1/4-, 1/8-, and 1/16-inch screens at other sites throughout the Maya region.
- At Guijarral, in particular, it would be interesting to look for possible middens further from the site center.

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  - Dr. Kitty Emery
  - And my fellow Maya zooarchaeologists, Elyse Anderson and Erin Thornton.

# Were the prehistoric Maya vegetarians?

## Excavation of faunal remains, or the lack thereof, at the site of Guijarral, Belize.

By: Erol Kavountzis, Graduate Student, Dept. of Anthropology

## Methods and Materials:

- Northeastern Illinois University (NEIU)
- Lead by Dr. Jon Hageman
- 11 undergraduate students
- 3 graduate students.

Figure 2: Location of Shovel Test Pits around Guijarral Site center.



## Field Sampling Technique:

- A grid of shovel test pits (STP) around the Guijarral Site Center (Figure 2).
- Shovel test pits is a sampling technique used by archaeologists to locate areas of artifact concentrations.
- These samples were about 15 m from the base of the structures in 5 m intervals in all four cardinal directions .
- Soil samples (4 liters) for both zooarchaeological, and ethnobotanical analysis were taken from each STP (Figure 3).



Figure 3: Shovel test pits for collecting soil samples. (in photo: S. DeLashmutt, J. Hageman, Leah)

## Laboratory research:

- 187 soil samples were collected
- Each sample was wet screened through nested 1/4-, 1/8-, and 1/16-inch screens using methods developed by Dr. Kitty Emery and Erin Thornton (Figure 4).
- This nested system of screens is used to collect both large and small animal remains.
- Screened samples were dried and scanned for faunal remains by myself and the students.

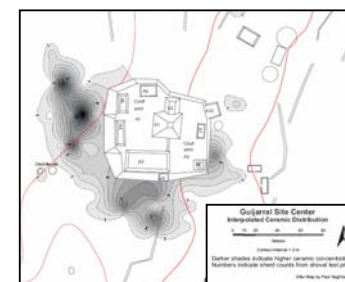


Figure 4: Processing soil samples: (a) screening station (b) close up of nested screens, (c) student sorting material looking for faunal remains

## Results:

- None of the samples contained faunal remains.**
- But, botanical remains were collected from many of the shovel test pits.
- And, some soil samples contained ceramics fragments.
- We were able to locate areas of ceramic concentrations that suggest these were original middens or areas of Deposition (Figure 5).

Figure 5: Concentration of ceramics from shovel test pits.



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## Introduction:

- Zooarchaeology is the identification and analysis of faunal, or animal, remains from archaeological sites.
- Analyzing animal bones, shells, and other invertebrate remains archaeologists are able to look at diet, ritual, production, trade, and many other important aspects of cultures.

## Site of Guijarral (RB-18):

- Located in Northwestern Belize (Figure 1).
- A rural Maya site that dates to the Late/Terminal Classic (A.D. 600-900).

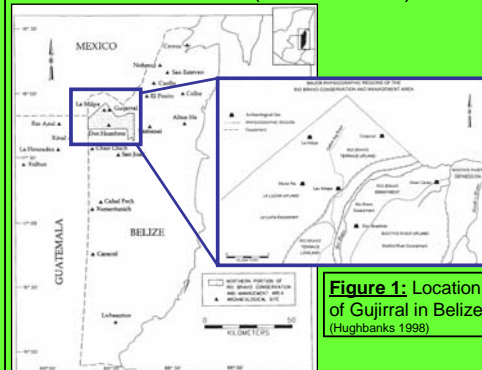


Figure 1: Location of Guijarral in Belize (Hughbanks 1998)

## Project Research goals:

- Location and recovery of faunal and floral remains from middens to complement the collections from 2006 (Hageman, et al 2006).
- As project zooarchaeologist, my goal was to find animal remains.
- Use of shovel test pitting around the site center to find concentrations of both botanical and animal bones from the area.
- Correlating faunal remains with other archaeological materials (ceramics, lithics) would help with the understanding of diet, cultural utilization, and disposal of animal remains at Guijarral.

## My Research Goals:

- How does preservation and recovery methods affect the quantity and type of remains recovered?
- On a larger scale, How does zooarchaeological sampling methods reflect the utilization of animals by the ancient Maya (ongoing research by Dr. Kitty Emery).