From Shells to Stories: Investigating Cerion uva Exploitation in Curação

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Introduction

Land snails have not been studied in archaeological contexts. Curaçao, a Caribbean island, is home to the *Cerion uva* gastropod and have been found in archaeological contexts. Ethnohistorical data suggests that Indigenous peoples ate them, but no archaeological research has been done to support this conclusion (Gould, 1969). This research is important to further understand the subsistence practices of the Indigenous peoples of Curaçao.

Site information

The site, C-1426, is a 60m long rockshelter from the Archaic (5700 - 4400BP) period (Kraan et al, 2024). It contains three hearth features and abundant faunal remains and lithic artifacts (Kraan et al., 2024). This research examines the *Cerion uva* snails from units 393 (hearth feature) and 486.



Figure 1. Image of the rockshelter taken by Emma Chong



Figure 2. Cerion uva specimens from Unit 486 by Emma Chong

Methods

Each snails was weighed, measured for total length, and analyzed for completeness (using a zone method (Giovas, 2009)), piercing, and burning. Snail relative abundance was compared to that of known naturally occurring and culturally deposited fauna co-occurring in the test units.

					Zone 1	Zone 2	Zone 5	Zone 3	Zone 4	Zone 6	Zone 7	Unknown	N/A
Catalogue No	Find Number	Unit (TP)	NISP	Weight (g)	R. aperture s	L Body Who	Body colume	R. Spire	L. Spire	Spire colume	Арех	Unknown	<50% of part
CU - 161	0015SHE	486	1	0.852	1	1	1	1	1	1	1	0	0
CU - 165	0015SHE	486	1	0.893	1	1	1	1	1	1	1	0	0
CU - 166	0015SHE	486	1	1.483	1	1	1	1	1	1	1	0	0
CU - 162	0015SHE	486	1	0.972	1	1	1	1	1	1	0	0	0
CU - 163	0015SHE	486	1	0.949	1	1	1	1	1	1	0	0	0

Burning		Height (complete aperture)					
Intensity	Piercing	Aperture (mi	Total (mm)				
0	0	6.22	22.33				
0	0	6.83	19.99				
0	0	6.12	22.9				
0	0	7.06	20.36				
0	0	6.04	23.48				
1	0	6.48	21.25				

Table 1 (above) showing the zone system (Giovas, 2009) and weight (taken by scale in grams)

Table 2 (left) showing the burning (based on intensity of colour scored 0-3 from unburnt to burnt) and the length of measurements (in milimeters, using Mitutuyo digital calipers).

Land snails provide insights into the subsistence practices of Indigenous peoples on the island of Curação.

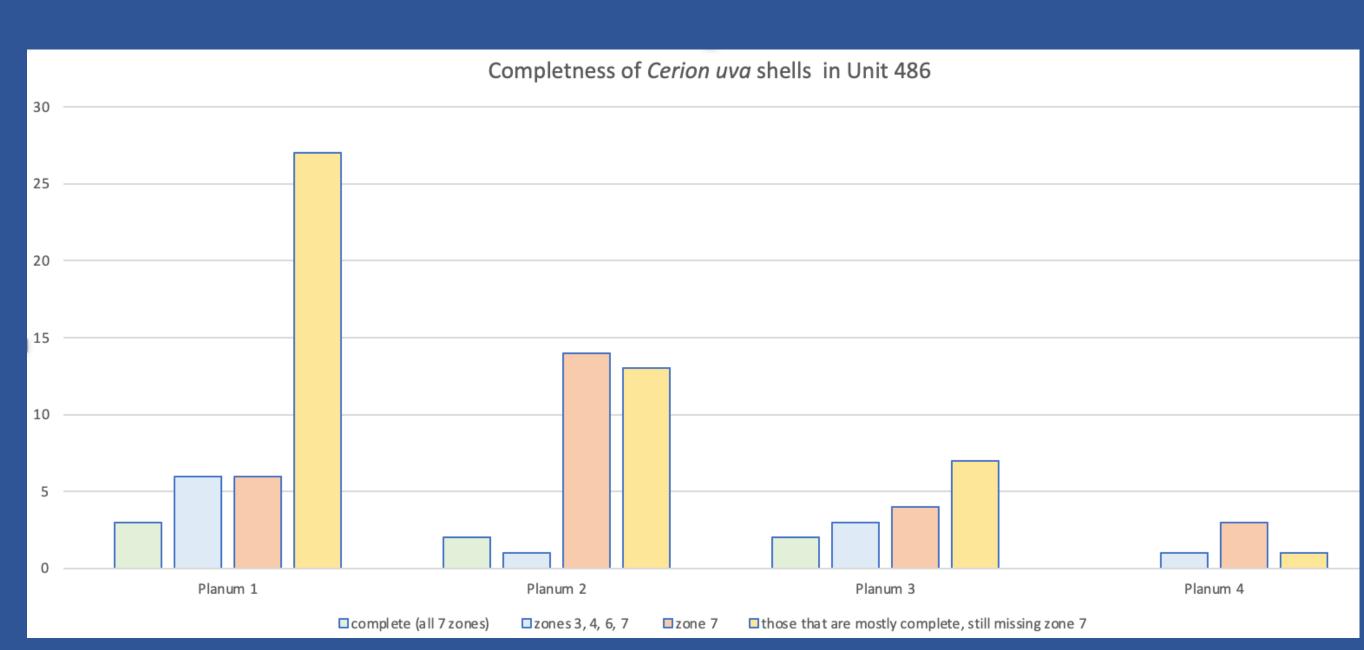


Figure 4. Cerion uva in Unit 486 based on completeness that would indicate cultural deposition. This is not including the fragmented pieces that were less than 50%.

Total specimens Unit 486 (NISP)	Planum 4	Planum 3	Planum 2	Planum 1	Total
Cerion	6	20	59	74	159
Tudora	83	100	139	119	441
Cistulops	13	7	5	4	29
Fish	6	42	114	100	262
Bivavle	3	27	121	239	390
Tudora Cistulops Fish		100 7 42	139 5 114	119 4 100	44 2 26

Table 1. NISP counts for unit 486.

Results

No naturally deposited *C. uva* shells were available C-1426 for comparison of the observed breakage. The abundance of the shells decreased as the unit went deeper. When comparing the abundance indices of the cultural fauna (fish, bivalve) and the natural fauna (*Tudora, Cistulops*) against the *Cerion uva*, there is no trend in unit 486. None of the shells in 486 exhibited signs of piercing or burning.

Abundance Indices (natural)	Planum 4	Planum 3	Planum 2	Planum 1
Tudora/tudora+fish	0.93	0.70	0.55	0.54
tudora/tudora+bivalve	0.97	0.79	0.53	0.33
Tudora/Tudora+cistulops	0.86	0.93	0.97	0.97
tudora/tudora+cerion	0.93	0.83	0.70	0.62
Abundance Indices (cultural)				
fish/fish+bivavle	0.67	0.61	0.49	0.29
fish/fish+tudora	0.07	0.30	0.45	0.46
fish/fish+cerion	0.50	0.68	0.66	0.57
fish/fish + cistulops	0.32	0.86	0.96	0.96

Table 2. The abundance indices using *Tudora* and fish indicate what the indices should look like if *Cerion uva* were natural (*Tudor and Cistulops*) or cultural (fish and bivalves) in unit 486.

Discussion and Conclusion

This research was inconclusive regarding natural versus cultural deposition of *C. uva*. Some results supported natural deposition, some suggested cultural deposition, and other were equivocal. These results may be due to factors which were not controlled for in this research such factors could be climate, the precipitation, or human activities at the site. Further research could aid in understanding the role that *C. uva* played in the Archaic period on Curaçao. We suggest that comparing archaeological *C. uva* to natural *C. uva* deposit.

References

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