

GIS and eDNA surveying a South Florida prehistoric site

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Abstract

The Five Mile Creek in Fort Pierce, Florida is a naturally occurring waterway with title flow from the St. Lucie river. Excavation of land adjacent to the creek has revealed the presence of both an unidentified, megafaunal fossil and action pottery. Environmental DNA.(eDNA) surveys of this site have been conducted to assist in identifying what organisms left their remains in this location. The upper 1 m of sediment at this site is bioturbated, but deeper sediments, particularly a red clay layer appear to remain undisturbed, in situ. The wide distribution of this red clay in locations >100m from the current path of the creek, suggests that this area has experienced greater in addition in the past. While this excavation is ongoing, an accurate map of the site is essential to producing an assessment of the ancient water flow in the general area under research. Results of a DNA analysis and mapping of this. Ancient Floridian site are presented here.