

2020 April *Guess that Plant*



Cyperaceae cf *Dulichium arundinaceum* (L.) Britt., Three-way Sedge

The April 2020 *Guess that Plant* was a test of our collective botanical skills. There are times when a whole plant is not available, and we are left with bits and pieces of a plant to make an identification. Such was the case with the same provided for the April's *Guess that Plant*. A sediment core retrieved from a special place in Gloucester County has provided a glimpse of Southern New Jersey's ancient flora. Within this core is the complete history from the Last Glacial Maximum to the present. A critical change occurred at or around 13,400 BP when sediment types and percent organics changed. At this point of change, a single achene from what is thought to be three-way sedge was retrieved. The tentative identification was made by Bill Hilgartner, a paleoecologist from John Hopkins, based on the characteristics from this photo.

Three-way sedge is an obligate wetland sedge that today is found in the shallow waters of pond and lake edges. Today it is found throughout New Jersey. Mary Hough (1983) curiously excludes Mercer and Somerset Counties from its State-wide distribution. This may only represent the lack of herbarium specimens, not the species actual distribution.

The presence of three-way sedge in Gloucester County 13,000 years ago is an indication of a wetland plant community that existed at the end of the Bolling-Allerod. It is but a small piece of a larger paleoecological puzzle now being assembled from botanical and invertebrate fossils. Bit by bit, the prehistory of a small Gloucester County site will be described and add a new insights on the plant community evolution in Southern New Jersey.

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