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CAEM 222 Midterm

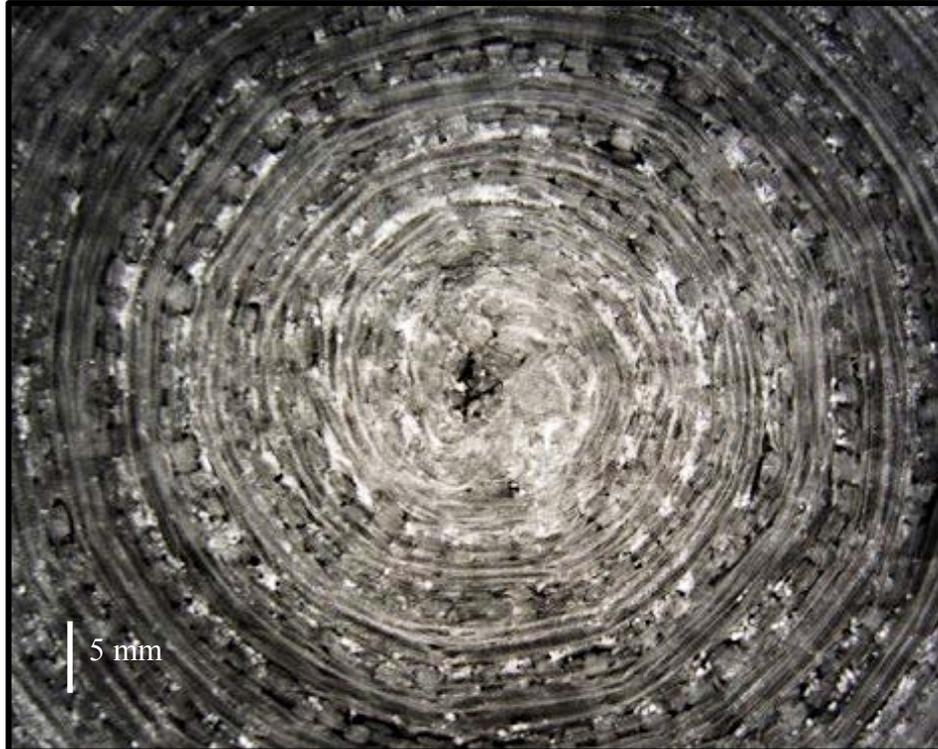
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In approaching an object, especially one with an association to a living community, a conservator should attempt to document aspects beyond condition. While the first priority for the conservator is the preservation of the object, other information - including that documented here about methods of manufacture - may be useful to the specific community in question. Object-specific information relating to materials and manufacture can be helpful for creating a more thorough object record for community members who are already informed about weaving and basketry. In the case of this basket (ACCM 2005.003.001) from the collection of the Agua Caliente Cultural Museum, it is possible to provide helpful information to Cahuilla weavers, ethnobotanists, revivalists, cultural descendants, and museum board members about the interesting departure from the norm in the manufacturing technique based on examination with stereomicroscopy and x-radiography.

One of the initial questions posed by brief examination of the basket included the materials used for construction. Yucca (multiple species) and deergrass (*Muhlenbergia rigens*) are usually used as the 'start' to the foundation of a coiled Cahuilla basket. Fine strands of split yucca are tied into a knot for a round start and coiling begins from the center. As weaving proceeds to the end of the yucca foundation, stalks of deergrass (a sturdier material) are added into the yucca strands and continue as the sole foundation material. In this case, x-radiography and examination using stereomicroscopy showed that the basket did not have the softer yucca central component, but instead begins and ends with deergrass as the only foundation material. At first, it was necessary to confirm the possibility of this technique, through conversation with

relevant experts in such basket weaving. Willie Pink, an ethnobotanist, first suggested the possibility that, when softer materials like yucca or twine were unavailable, the ends of the deergrass were beaten and/or chewed to soften them more than simply placing them in water. This softer version of deergrass could then be manipulated into a knot and function as a start. This manufacturing technique was observed in another basket from the Agua Caliente Cultural Museum collection and documented in a paper concerning other manufacturing materials, so there is a precedent for this type of manufacture (Pearlstein et. al. 2008). Based on the examination and conversations with relevant experts, more information can be added to the record of this basket, and an interesting comparison drawn between it and the one cited in the aforementioned article.

"Communication between the conservation professional and the owner, custodian, or authorized agent of the cultural property is essential to ensure an agreement that reflects shared decisions and realistic expectations". AIC Code of Ethics

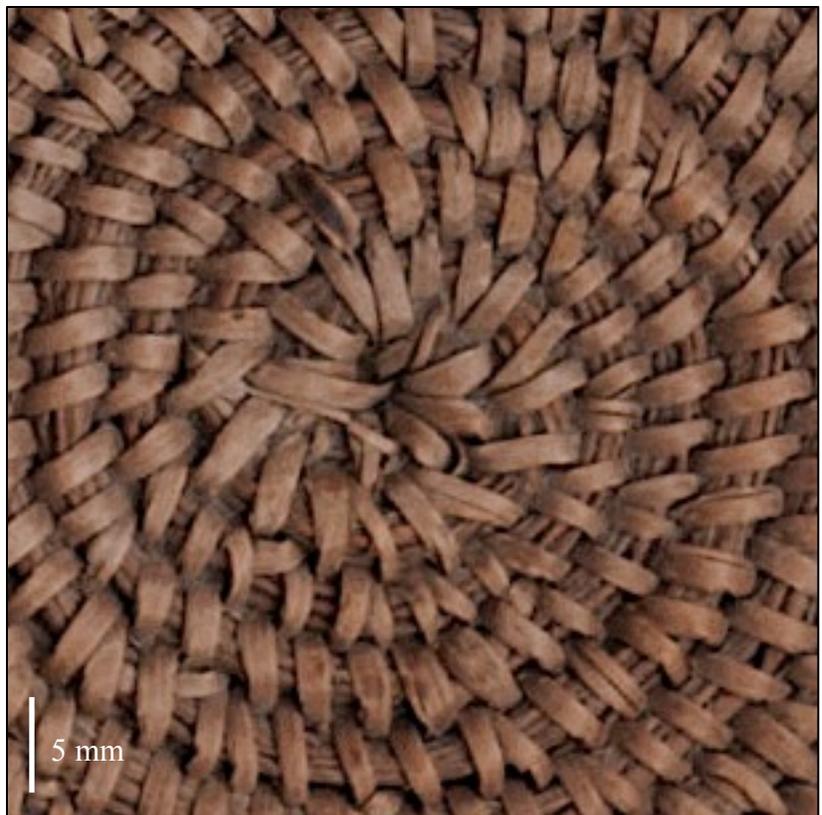


X-radiograph of basket start [22.6 kV, 5.4 mA, 2.5 mm focal spot, 2 minutes, with the naked film positioned directly under the basket]



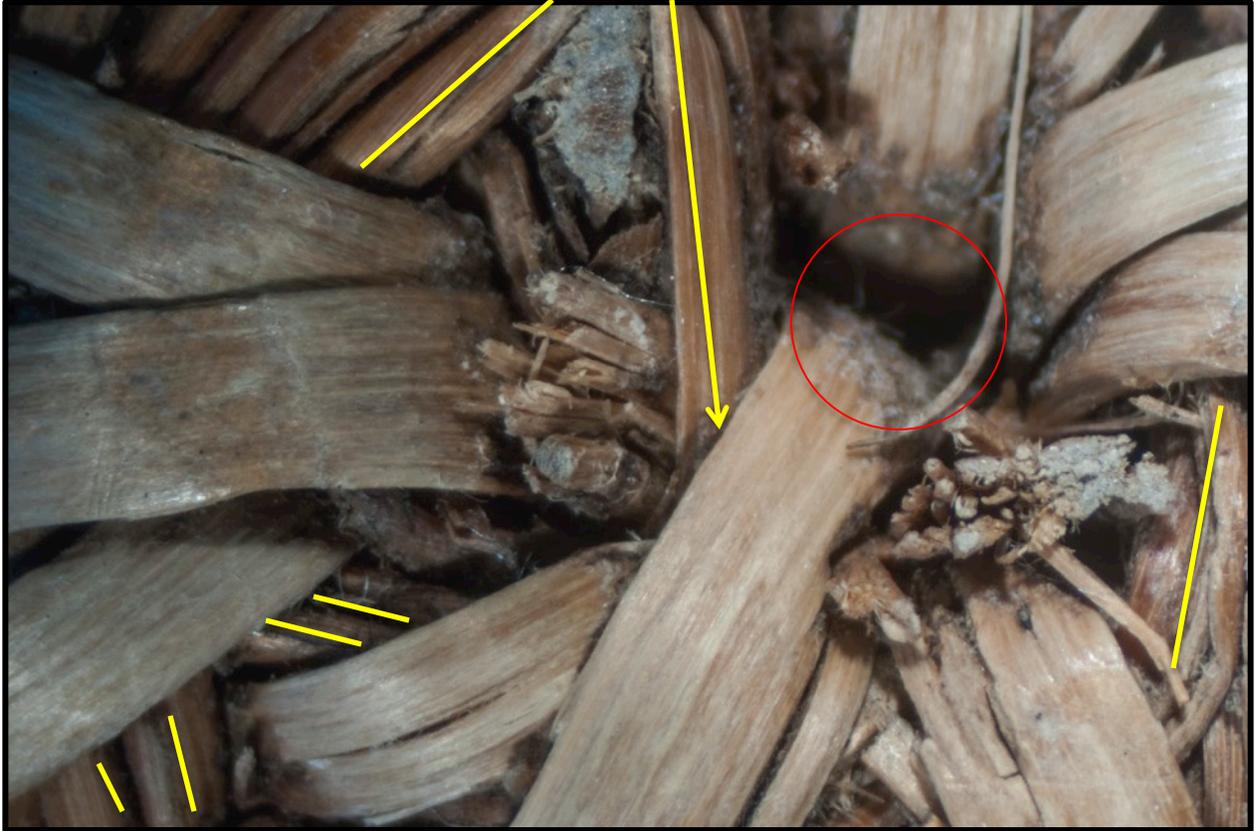
Basket 2005.003.001
Macro image of the start
from the exterior side (top)
from the interior side (right)

These images show the spaces between stiches where the foundation appears to be the same material from start to finish. The thicker, rounded rods are likely deergrass culms, mashed to create a softer tool for the knot. The less flexible deergrass results in 'elbows', kinks in the material at the smaller diameters.





Photomicrograph of basket start - foundation material visible between the stitches do not appear to be the thinner yucca fibers more widely used as the start

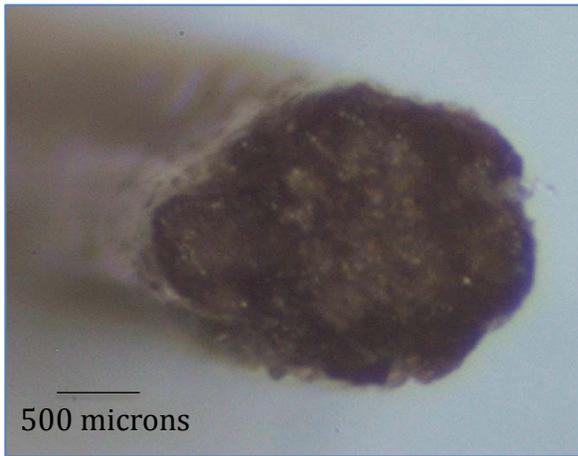


Yellow lines track the foundation material around the center of the knot (red circle). There is no visual evidence close to the center that a material other than deergrass was used in construction.

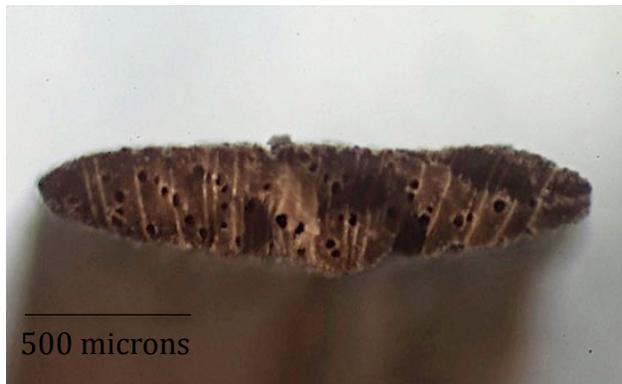


Example of modern basket starts, crafted using fine, soft strands of yucca tied into a knot to serve as the foundation - note the significant diameter difference between stitches and foundation strands, also lack of bent elbows visible in older basket start

A small piece of the start material became loose during examination and was inspected to assist with identification. While not conclusive, the comparison between the reference polarized light image and the photomicrograph of the basket sample have similar plant fiber morphology.



Along with this, a fragment of a coil from the tan/brown colored coils was inspected with a stereomicroscope to assist with identification. Interestingly, it is not the more commonly used juncus (*Juncus textilis*) strands, but rather a woody material due to the present of pores and rays, likely sumac (*Rhus trilobata*) or willow. The abundance of pores suggests willow.



Willow from UCLA/Getty Conservation program reference collection



References

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- Personal Interviews, 1/31/2017. Willie Pink (Pechanga, ethnobotanist), Cara Stansberry (ACCM), Ozge Gencay Ustun (Autry Museum conservator), Rose Ann Hamilton (Cahuilla weaver), Sean Milanovich (Agua Caliente tribal member, traditionalist), Abe Sanchez (Seri weaver), Bryn Potter (Independent basketry expert), Jan Timbrook (Ethnobotanist and curator, Santa Barbara Nat Hist Museum).
- USDA-NRCS PLANTS Database / Hitchcock, A.S. (rev. A. Chase). 1950. *Manual of the grasses of the United States*. USDA Miscellaneous Publication No. 200. Washington, DC.