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REMOVING FOSSIL RIBS: THE THREAD TECHNIQUE

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Preparators often face the problem of extracting high priority pieces (e.g., cranial elements) from beneath ribs in jumbled vertebrate fossil skeletons. The thread technique was recently developed when faced with this situation in preparing two dinosaurs; one from Ghost Ranch (New Mexico) and one from the Gobi Desert of Mongolia. Both blocks contain skeletons preserved as dense assemblages of disarticulated bones that must be separated and prepared as individual elements.

Especially problematic are areas where multiple, fragile, fractured ribs are interwoven and overlying skull elements.





In order to untangle and lift each rib, a piece of sewing thread is first adhered to the surface with a thick, temporary coating of Paraloid (Acryloid) B72 in acetone. The thread and thick coating span the fractures and gaps to hold them together but remain flexible.





With this system the overlying end of one rib can be folded back to pull out an underlying rib.

The rib is then lifted on the thread like a beaded necklace preserving the order of the segments.

The thread technique allows the ribs to be set aside indefinitely while higher priority elements are removed and prepared.





The rib fragments are later removed from the thread one by one, the coating cleaned with a needle or acetone and the fragments reassembled with a thick (50%) solution of Paraloid (Acryloid) B72 in acetone.