Method for Controlled Fracture of Anthracological Specimens Using Parafilm #80 Rob Q. Cuthrell

One problem encountered when trying to snap archaeological charcoal pieces is accidently crushing the samples that are oddly shaped or just small. This method helps mitigate crushing by cushioning the pieces of charcoal in Parafilm. It also helps to produce cleaner and more regular snaps than just snapping by hand.

1.Cut out a small strip of Parafilm about as wide as the archaeological sample and about 2-3 cm long.



2. Grasp both ends of the Parafilm strip and stretch it gently until it is very thin and flexible.



3.Wrap the archaeological sample with the Parafilm parallel to the direction you wish to snap the specimen. The Parafilm should be wrapped around the specimen >5 times. Begin by wrapping the Parafilm loosely around the specimen. As the sample is wrapped, gradually tighten the wrapping until the specimen is held together firmly by the Parafilm.



4. When the specimen is wrapped, use a scalpel to cut the Parafilm around the circumference of the specimen along the plane you wish to snap the specimen, but only 2/3 of the way around, leaving a bit that will keep the two pieces joined. Try not to cut into the specimen itself.

5.Place the specimen over a probe that has been modified to have one flat side on the handle so that it sits stably on the table (alternatively use plastic-coated paperclip or other small-diameter cylindrical object so that the plane in which you wish to snap it is parallel to the cylinder).



6.Holding the specimen ends over the probe needle where you want it to break, begin gently pressing down on both ends, increasing pressure until the specimen snaps. The specimen should snap cleanly along the plane you have cut. The Parafilm holds the pieces of the charcoal together even if the specimen is slightly crushed or fractured.

7.For analysis, the opened specimen can be placed in salt with the Parafilm still holding it together to view under the 'scope. To fracture along a different plane, the Parafilm will need to be removed.

