ABSTRACT

TITLE:	Saw Mark Analysis on Bone: Kerf Measurements on Human Versus Nonhuman
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ABSTRACT: Dismemberment of human remains usually catches the attention of the media and the public. Marks left on the bones can provide clues about the methods and tools used that contribute to an understanding of the circumstances surrounding a death. The purpose of my study is to validate the use of minimum kerf width to identify saw type used on nonhuman bones, and show that it is similar to those marks made on human bone. Using nonhuman bones and three different types of saws several cuts were made and then measured. The results of this study, when compared to the other two studies (Symes 1992, Love 2010), match the Love's study to the three significant digits. Symes' study is rounded to two significsnt figures. The range between all the studies is from 0.04 inches to 0.032 inches. The differences between both Love's (2010) study and mine when compared to Symes' (1992) study are shown in the standard deviation. The results support previous studies that demonstrate minimum kerf width can be used to distinguish between hacksaws and reciprocating saws. In addition they show that cow bone can be used as a proxy for human bone in experimental studies of this type.