ABSTRACT

TITLE:	Forensic Entomology: The Effects of Burning on Insect Successional Patterns on a Porcine Corpse
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ABSTRACT: An experiment to determine the effects of burning on insect succession on a corpse was conducted using the carcasses of domestic pigs, Sus scrofa, with one being burned, the treatment pig, and one being unburned, the control pig. A CGS Level II burn was achieved on the burnt carcass (Glassman and Crow 1996). The study was conducted in an agricultural field near the San Juan River in Bloomfield, New Mexico, from August 10, 2010 to September 27, 2010. There was no difference in the stages of decomposition between the control and treatment carcasses. The succession of fly species was nearly identical between both carcasses except for a two day delay in the colonization of the treatment carcass by Muscidae species. The most notable difference in succession was a 10day delay in colonization of the control carcass by Coleoptera species. However, this is more likely due to an event that occurred between the site visit on August 14, 2010, and the visit on August 15, 2010, that appears to have caused all the maggots on this carcass to die. Further study is needed to conclusively determine the effects of burning on insect succession on carrion.