## POSITION STATEMENT: PRIMARY FIELD DOCUMENTATION BY DIGITAL PHOTOGRAPHY Archaeological Collections Facility of West Virginia Holly Metz, Curator

It has come to our attention that many archaeological consultants are interested in using digital photography for documentation of excavations while discontinuing the use of 35mm film photography. The Archaeological Collections Facility (ACF) does not accept digital photographic records as primary documentation. High quality 35mm photography on black and white film remains the long-term preservation standard. For those interested in creating a digital record of excavations, we recommend that a CD of digital images of the film be ordered at the time of development, and that digital cameras be used in the field for secondary documentation.

Film and digital photography are both viable tools, rather than competing alternatives. The answer is to select and use these tools wisely, employing each technology to its best advantage.<sup>1</sup> Digital photography has wonderful capabilities. It enables access to information that normally would not be attainable due to distance, and "virtual" examination of especially fragile artifacts. Digital photography should certainly be used when appropriate. If we move too quickly to selecting it for primary documentation, however, the legacy we leave in trust for the people of West Virginia may be severely compromised.

Digital photographic technology is in its infancy, much like traditional photography was in the 1840s. It is experimental. Although all photographs are unstable (no negative or print will last forever), a black and white negative on polyester based silver gelatin film stored in proper environmental conditions has a life expectancy of 500 years.<sup>2</sup> Black and white acetate film (the material most commonly used by archaeological consultants in the field) has a life expectancy of 100 years.<sup>3</sup> Unmanaged digital image files currently have a 5-10 year life expectancy.<sup>4</sup> "We now know of projects where the digital data is no longer accessible after only a decade or two". <sup>5</sup>

Appropriate electronic hardware and software must be used to maximize the life of digital data.<sup>6</sup> Highresolution digital cameras are very expensive. "It takes a pretty expensive digital camera to equal the quality of even a disposable film camera. If the digital camera costs less than five to ten thousand dollars, chances are that even a disposable camera will be better in terms of resolution"<sup>7</sup> The computer hardware and software required to read digital images changes rapidly. Unlike film-based images, once the digital image has been taken, there are large and often unpredictable hidden costs involving these computerbased "artifacts'.

Custodianship of digital images requires a massive commitment of money as well as skilled labor to recommend, install, staff and maintain the infrastructure to ensure readability of digital data over the long-term. How will the images you are creating last? Will the collections facility have money and skilled labor available to purchase equipment and software necessary for updates of multiple media types? If so, will there be money and skilled labor available to migrate (copy) all of the images over to new formats (and storage media) as necessary? We currently have no way of answering these questions.

It is the responsibility of archaeologists to create records on long-lived media of archival quality. Our charge as caretakers of the West Virginia Archaeological Collections and the associated records is to preserve the artifacts, documents and images for the longest time possible while on our watch. Because digital technologies are still in their infancy, and we cannot at this time guarantee the resources to maintain them, we strongly encourage all consultants to discontinue the use of digital photography for primary documentation. We will use digital secondary documentation to evaluate future changes in documentation policy. The continued use of traditional film-based photography will best insure the preservation of this important information that we create and hold in trust for the people of West Virginia.

<sup>&</sup>lt;sup>1</sup> Steven Puglia, *Workshop: Planning Your Digital Imaging Project* 

 <sup>&</sup>lt;sup>2</sup> Steven Puglia, Creating Permanent and Durable Information: Physical Media and Storage Standards
<sup>3</sup> ibid.

<sup>&</sup>lt;sup>4</sup> ibid.

<sup>&</sup>lt;sup>5</sup> Andrew Robb, Photograph Conservator

<sup>&</sup>lt;sup>6</sup> National Park Service, Managing Archaeological Collections: Technical Assistance

<sup>&</sup>lt;sup>7</sup> Kent Thompson, Museum Photographer