



Authentication of Native American Artifacts

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knife case

Flesher & Awl

Knife Case

Knife

Cultural/Spiritual

Procedure

Interpret symbols and meanings on

Develop analytical parameters via

Results

cultural/spiritual restrictions

Utilitarian/non-spiritual

Utilitarian & Warfighting

Protective Designs

Interview knowledgeable figures



Historical Significance

Procedure

- Interview knowledgeable figures
- Build timeframe of tribal movements and materials available

Results

- Flesher & Awl
 - Dual-purpose makes it unique
 - Made by Blacksmith
 - Made from rifle or musket
- Knife
 - Abandoned or stolen metal
 - Hard to date
- Knife Case

Made from musket

life or warfare Elk horn handle

Lakota Sioux

Wire-stitched tip of case is common from 1870's onward

Conclusions

Flesher and Awl

· Crafted by an experienced blacksmith

Knife and Case

· Symbolic features on the case are strictly

Dual-sided blade used for everyday

Most likely manufactured prior to

Introduction

One of the struggles that Native American tribes face today is to maintain their unique cultural identities. Tribal independence is entwined within cultural identity and economic development. The demand for Native American artwork has driven counterfeiters to supply over 1.5 billion-dollars of paintings, rugs, jewelry, textiles, and pottery globally. These faux products ultimately decrease the value of the local artisans work as well as diminish tribal identity. Through developing this technique for authenticating Native American artifacts, we hope to validate the need for original, authentic Native American artwork.







Figure 3. Awl

Figure 1. Knife and Case

Figure 2. Flesher and Awl

Results

- Flesher
 - No rifling
- Knife
 - Held by glue into elk horn handle
 - Partial tang extending 34 the handle length

Lack of rifling

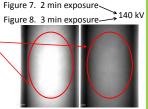
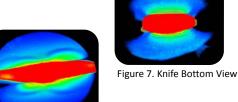


Figure 4. Figure 5. Flesher barrel



Physical Analysis

Procedure

Obtain clear images using Visual

tang using Micro-Computed

Analyze interior of flesher and knife

Spectral Comparator

Tomography

Figure 6. Knife Top View

Wire Stitching

Figure 12. Case tip

Figure 8, Knife Blade



Figure 9. Side Profile



Figure 10. Front Profile



Figure 14. Elk horn Handle

Future Work

1860's

- Perform X-Ray Fluorescence Spectroscopy and Optical Metallography for structural and chemical composition
- Interview blacksmith to determine techniques used
- Continue to build/broaden database for authentication to other tribes
- Streamline process to get faster results

Figure 13. Protective Designs **Acknowledgments**