BACK TO THE MOUNTAIN: LONGITUDINAL INVESTIGATION AND ARCHAEOLOGICAL RESEARCH PROGRAMS

Lawrence Todd

Greybull River Sustainable Landscape Ecology Project 2002-2008

Mission Statement:

Integrating natural and social sciences to promote local ecological and economic sustainability through transdisciplinary research, education, and stewardship initiatives.
GRSLE 2002-2008
7 MA Theses
58 Plains Conference Presentations
13 Other Conference (SAA, GSA, AAAS) and Public Presentations

Key Sites
What does the rest of the region look like?

66th Plains Anthropological Conference, Laramie, Wyoming
Remote – little recent human impact, but what about prehistoric impacts?

Creating Sampling Units

- 29 Allotments in current project
- sample (usually following hydrological boundaries)
- 135,160 ha (333,992 ac) total
- have done work in 20 allotments
- Have surveyed 1.2% in block
- surveys (2002-2008) – approaching 2% when trail corridors included
Survey and Documentation

2002-2008

At start of project, only 7 prehistoric sites reported from project area, part of which is shown here. This is largely a non-collection project.

Peopling a Wilderness

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Slope ≤ 15°
Block areas (green) Trail Corridors (blue)

Cumulative Record

66th Plains Anthropological Conference, Laramie, Wyoming
Some Baseline Regional data

- assemblage data from 324 sites
- observations on >66,000 artifacts
- 614 morphologically dated points

What are the regional patterns?
### Chipped Stone Sources

<table>
<thead>
<tr>
<th>RAW MATERIAL</th>
<th>N</th>
<th>%</th>
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<tbody>
<tr>
<td>Basalt</td>
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<tr>
<td>Chert</td>
<td>30545</td>
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<td>Chalcedony</td>
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<td>Dollar MTN Chert</td>
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<td>Dollar MTN Quartzite</td>
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<td>Green Absaroka Chert</td>
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<td>Obsidian</td>
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<td>Phosphoria Chert</td>
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*68th Plains Anthropological Conference, Laramie, Wyoming*
Large, Diverse Site Assemblages

68th Plains Anthropological Conference, Laramie, Wyoming

N=348

N=196

N=19

N=32

PROJECTILE POINT TEMPORAL ESTIMATION

68th Plains Anthropological Conference, Laramie, Wyoming
An Ever Changing Landscape

66th Plains Anthropological Conference, Laramie, Wyoming

Ollie 2008
FEATURES

PARSING THE LATE PREHISTORIC

Beginning to refine part of the picture
METAL ARTIFACTS

- 48PA2772 Percussion cap
- 30 caliber lead ball
- 024-07 adze
- 48PA2789 bracelet

66th Plains Anthropological Conference, Laramie, Wyoming

CERAMICS

- 3 sites
- 4 vessels

66th Plains Anthropological Conference, Laramie, Wyoming
To date, have 12 sites with trade beads and 3 with intermountain ware.

No sites with both.

Use of higher elevations decreases through the Late Prehistoric.
Use of obsidian increases through the Late Prehistoric

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**Upper Piney Site**

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68th Plains Anthropological Conference, Laramie, Wyoming
Changes in Surface Visibility

68th Plains Anthropological Conference, Laramie, Wyoming
Protohistoric Bison Processing at 2500 m (8200 ft)

Upper Piney Creek Site

FEATURES WITH BEADS AND CHIPPED STONE
FEATURES WITH MOSTLY CHIPPED STONE
FEATURES WITH MOSTLY BEADS
Inter- and intrasite variation

Thanks to: Shoshone National Forest, residents of Meeteetse and especially to field crews.