**Wait, Weight Don’t Tell Me: A Synthesis of Atlatl Weights in Colorado**

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**Purpose**
- Atlatl weights, also known as boatstones, are curious artifacts with a debated function. The occurrence of this rare artifact form in Colorado demonstrates connections to other locations in North America.
- Weights still attached to the atlatl are found in dry caves of the Great Basin, Southwest and Great Plains. A chipped stone atlatl weight attached to the atlatl was uncovered in northeastern Arizona.
- A compilation of data from private collections, a museum repository, and OAHP files provides clues to answer questions which surround this rare artifact type.
- Do atlatl weights represent a connection to the Eastern Woodlands? Typologies in Colorado strongly resemble those of Eastern Woodlands, suggesting the exchange of goods and/or ideas to the Plains.
- Do the presence of atlatl weights represent the functional use of atlatls in Colorado through time?
- Is there a difference in the types of atlatl weights found in Archaic versus Early Ceramic contexts?

**Distribution of Atlatl Weights in Colorado**

- The three weights recorded in the western counties have no available measurements or photographs and the coding of these artifacts as atlatl weights could be debatable.
- The general distribution of atlatl weights is concentrated in northeastern Colorado; however, it is important to note that the majority of professionally recorded weights are along the South Platte river basin and the foothills of the Front Range.
- It is concerning that the majority of the weights available for this study are from collectors (n=37), rather than professionally recorded (n=11); bringing attention to the amount of data archaeologists could be overlooking.

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**Measurements of Complete Atlatl Weights**

<table>
<thead>
<tr>
<th>No</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>72.94</td>
<td>18.94</td>
<td>46.0-110.5</td>
</tr>
<tr>
<td>Max Width</td>
<td>24.20</td>
<td>5.86</td>
<td>15.0-37.9</td>
</tr>
<tr>
<td>Max Thickness</td>
<td>19.28</td>
<td>5.20</td>
<td>7.5-29.7</td>
</tr>
<tr>
<td>Weight (g)</td>
<td>10.83</td>
<td>30.07</td>
<td>6.4-45.5</td>
</tr>
</tbody>
</table>

**Metric Analysis (n=36)**
- A weak negative correlation between maximum length and width - as weights get longer they seem to get thinner.
- The standard deviation for weight is lower when the chipped stone atlatl weight is omitted.
- Only atlatl weights with complete measurements were used for analysis.
- Due to variability in the shape of boatstones, we plan to perform a more detailed metric analysis.

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**Colorado Boatstone Typology (n=33)**

- Groundstone Grooved Type A 41%
- Groundstone Faceted Sides Type B 28%
- Perpendicular Groove Type C 19%
- Parallel Groove Type D <1%
- Decorated Type E 1%
- Chipped Stone Type F <1%
- Fishing Pattern Type G <1%

**Patterns and Trends**
- Early Ceramic burials seem to be a possible Woodland expression in Colorado, because atlatl weights with perpendicular grooves are identical to some Eastern Woodland forms.
- Conventional wisdom of the Early Ceramic period is that the bow and arrow replaced the atlatl; but atlatl weights found in these burials challenges this idea suggesting that both technologies were still in use.
- Only one atlatl weight per site speaks to the rarity of this artifact type in Colorado. This frequency could be attributed to the use life of atlatls and weights in comparison to dart points.
- There are only boatstones in Colorado, even thought there is an isolated bannerstone in Wyoming – a possible connection to the Ohio Valley obsidian exchange.

**Conclusions**
Atlatl weights in Colorado are not a common find. Those weights that have been recovered are considered to be boatstones; and are often found on sites with either Early Ceramic or Woodland components. This may provide evidence for a connection to the Eastern Woodlands in prehistoric Colorado. Most weights in the area fit into designated typologies and display trends that need to be explored further.

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