How has the abundance of Western Wheatgrass (WW) changed over the past 4 years (2013-2016) in relation to grazing management?
WW tiller densities at the start of the experiment (i.e. in 2013 & 2014, prior to grazing treatment taking effect)
WW tiller densities did not increase more in AGM vs. TGM pastures
Change in WW abundance averaged across 10 AGM vs. 10 TGM pastures, 2013-2016

<table>
<thead>
<tr>
<th>Treatment</th>
<th>AGM</th>
<th>TGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of Increase 2013-2016</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Net Increase 2013-2016</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

How fast did they increase? How much did they increase?

WW Rate of Increase (2016 density divided by 2013 density per pasture; thick black line is mean ROI; thin line is median); no statistical difference between grazing treatments

WW Net Increase Increase (2016 Density minus 2013 Density per pasture; thick black line is mean change); no statistical difference between grazing treatments
Change in WW abundance averaged across 6 AGM pastures rested in 2015 vs. 6 paired TGM pastures

How fast did they increase relative to 2013 density?

How much did they increase relative to 2013 density?

WW Rate of Increase (2016 density divided by 2013 density per pasture; thick black line is mean ROI; thin line is median); no statistical difference between grazing treatments

WW Net Increase Increase (2016 Density minus 2013 Density per pasture; thick black line is mean change); no statistical difference between grazing treatments
Meaning of boxplots

• Thick black line is mean
• Thin line is median
• “Error bars” show $10^{th}$ and $90^{th}$ percentiles, which can only be computed for samples $\geq 9$
• Upper and lower edge of box are $25^{th}$ and $75^{th}$ percentiles