Evaluation of Columbia, USMARC-Composite, Suffolk, and Texel Rams as Terminal Sires in an Extensive Rangeland Production System

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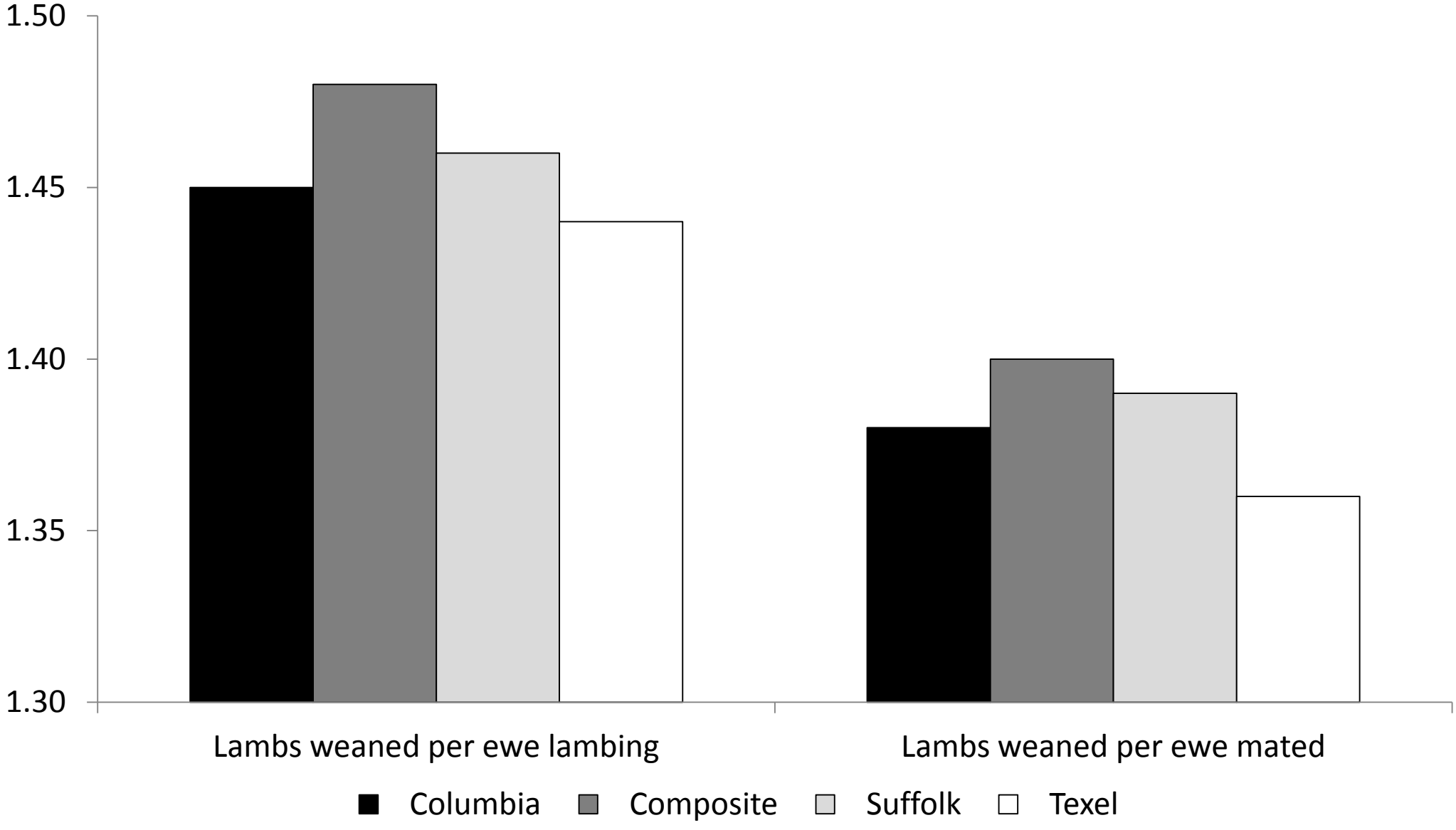
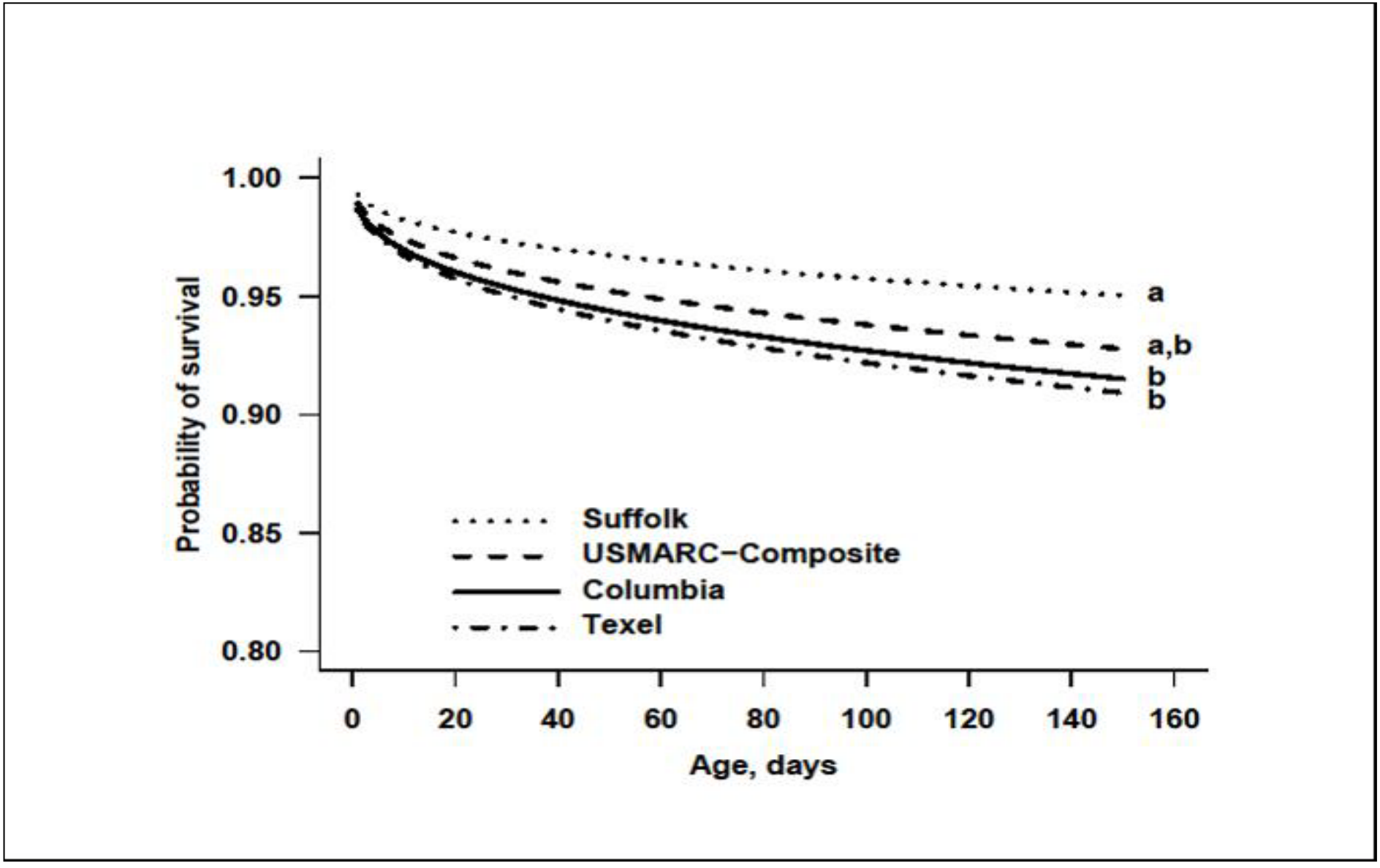
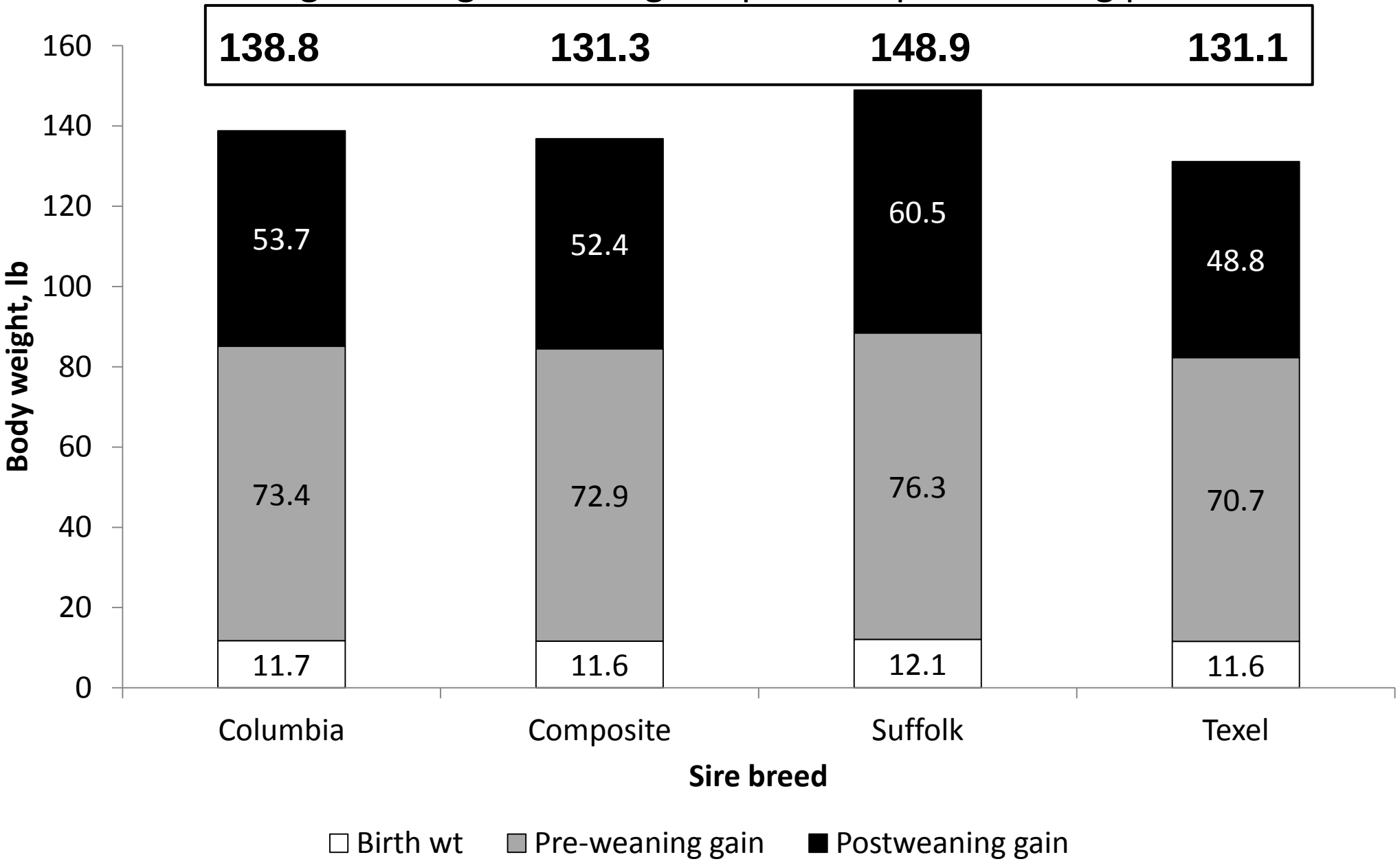
Numbers of lambs weaned per ewe mated for Rambouillet ewes mated to Columbia, Composite, Suffolk, and Texel rams. Differences among the sire breeds are not statistically significant.



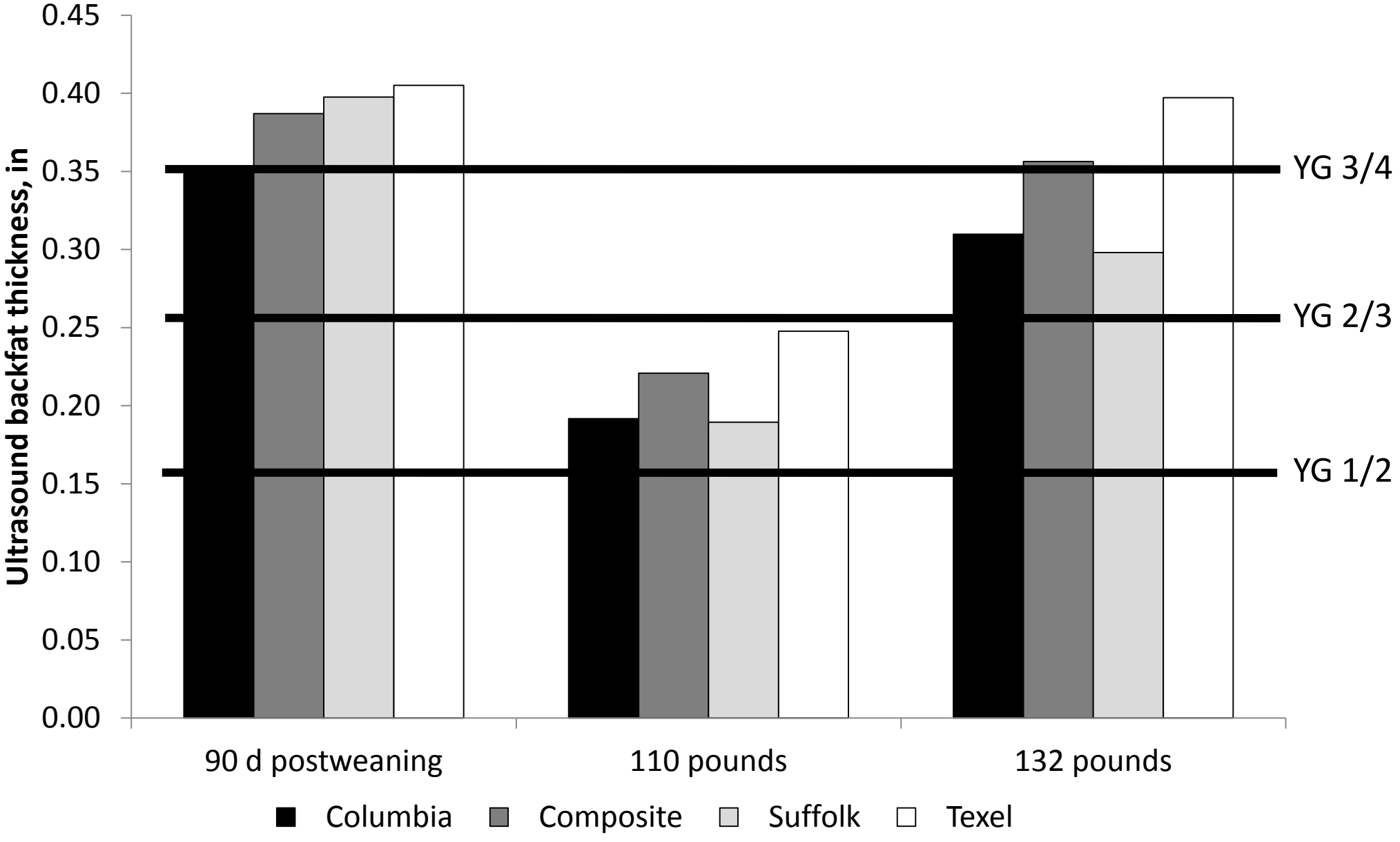
Survival functions from birth to weaning for lambs sired by Columbia, Composite, Suffolk, and Texel rams, and adjusted to a lamb born in 2007 to a 3-yr-old ewe. Sire breeds that do not share a common letter differed ($P < 0.05$) for survival rate.



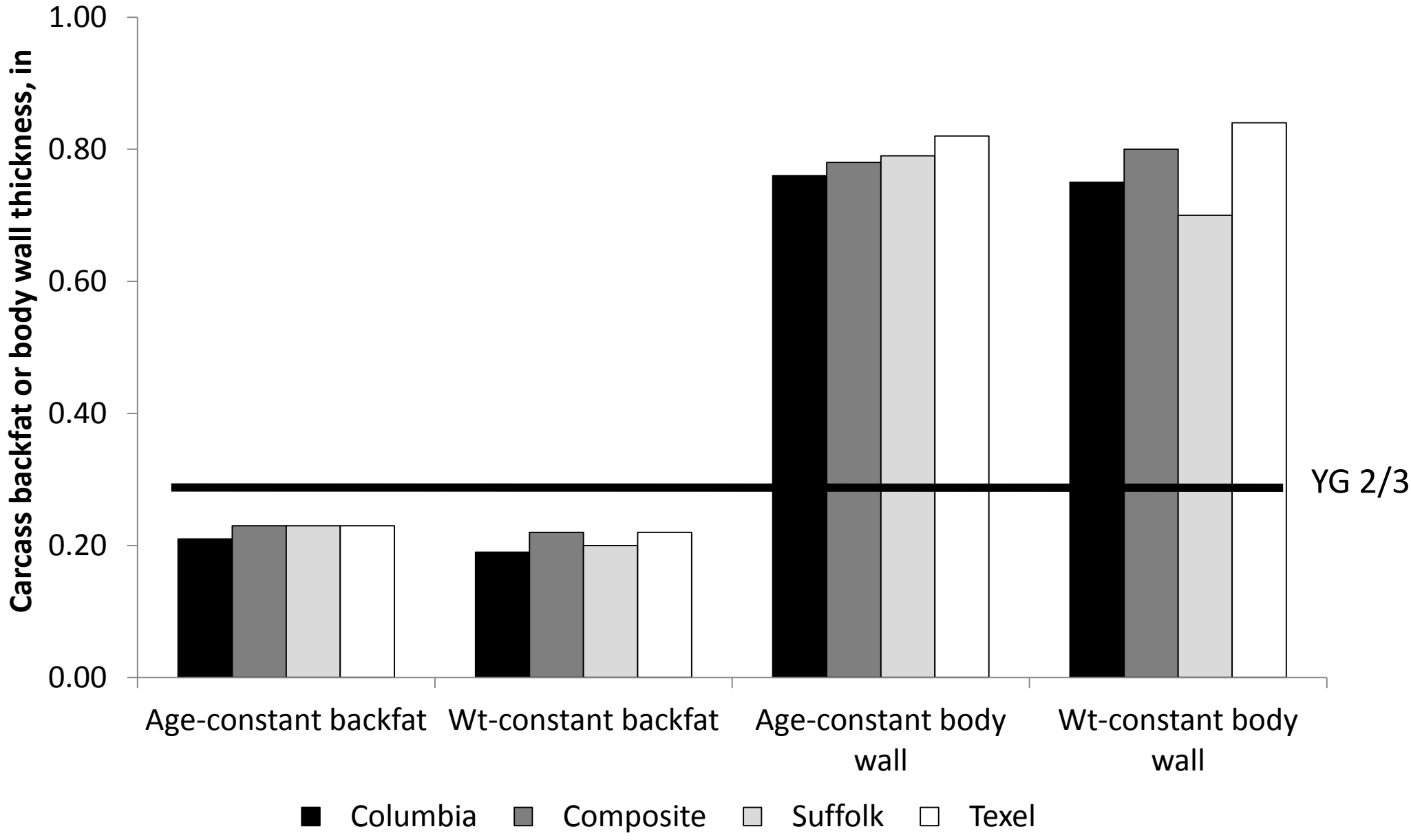
Body weights at birth, weaning, and 90 days postweaning for lambs sired by Columbia, Composite, Suffolk, and Texel rams. Values within shaded columns are birth weights and gains during the pre- and postweaning periods



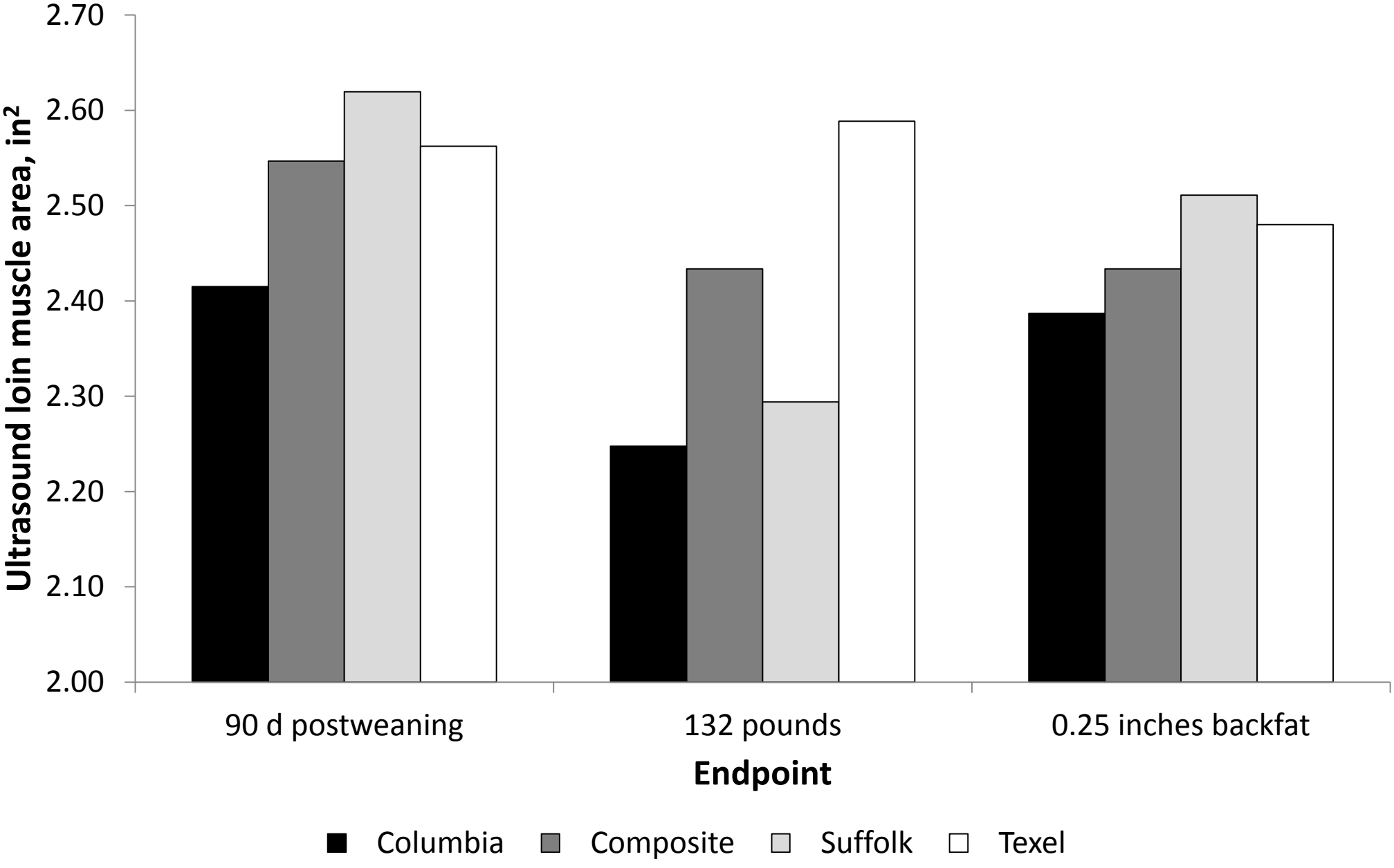
Ultrasound backfat thickness for ewe and wether lambs sired by Columbia, Composite, Suffolk, and Texel rams at 90 days postweaning, or 110 or 132 pounds live weight . Horizontal lines designate boundaries between Yield Grades 2 and 3 or 3 and 4



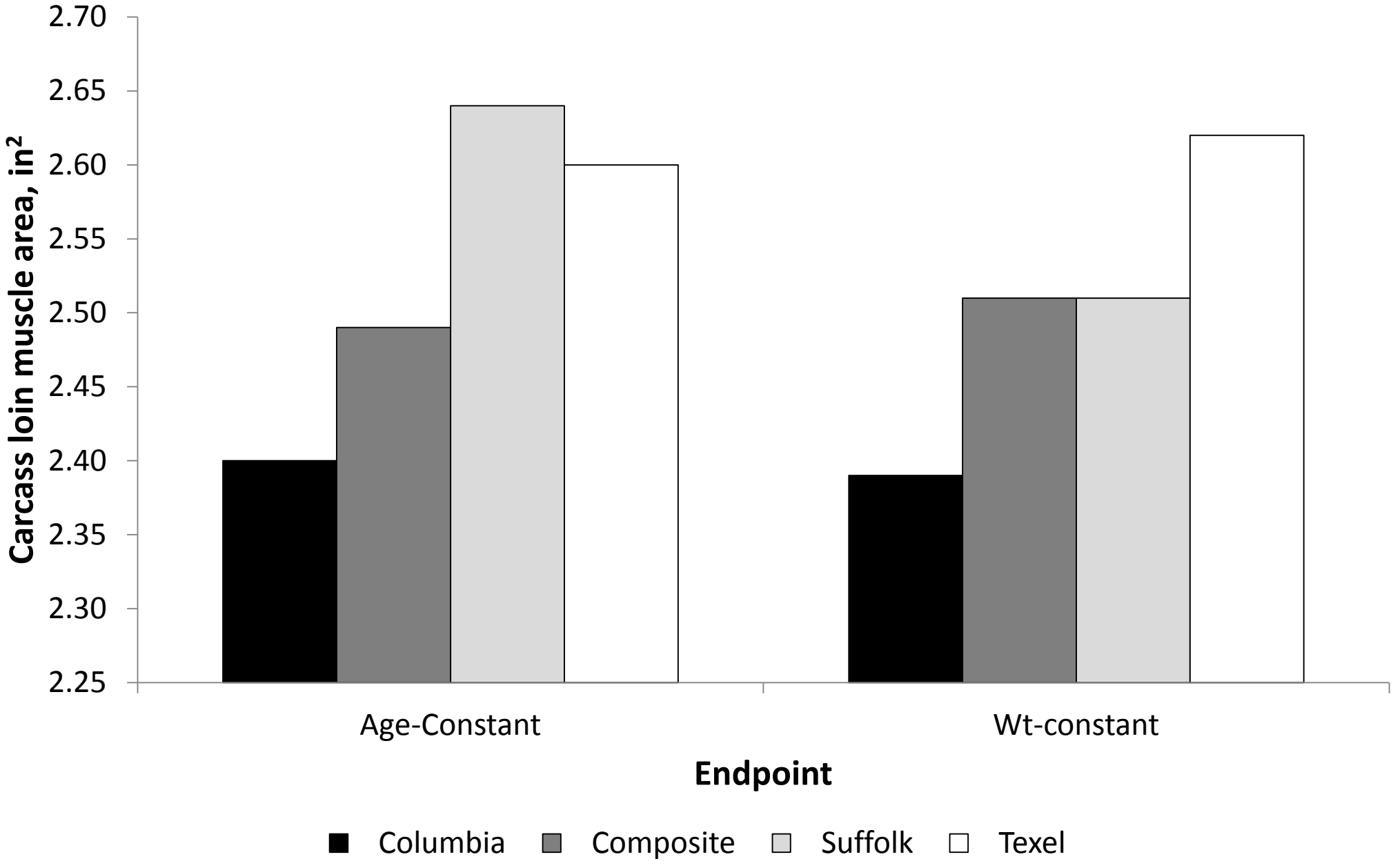
Carcass backfat and body wall thicknesses for wether lambs sired by Columbia, Composite, Suffolk, and Texel rams at age- or weight-constant endpoints. Horizontal line is the boundary for carcass backfat between Yield Grades 2 and 3



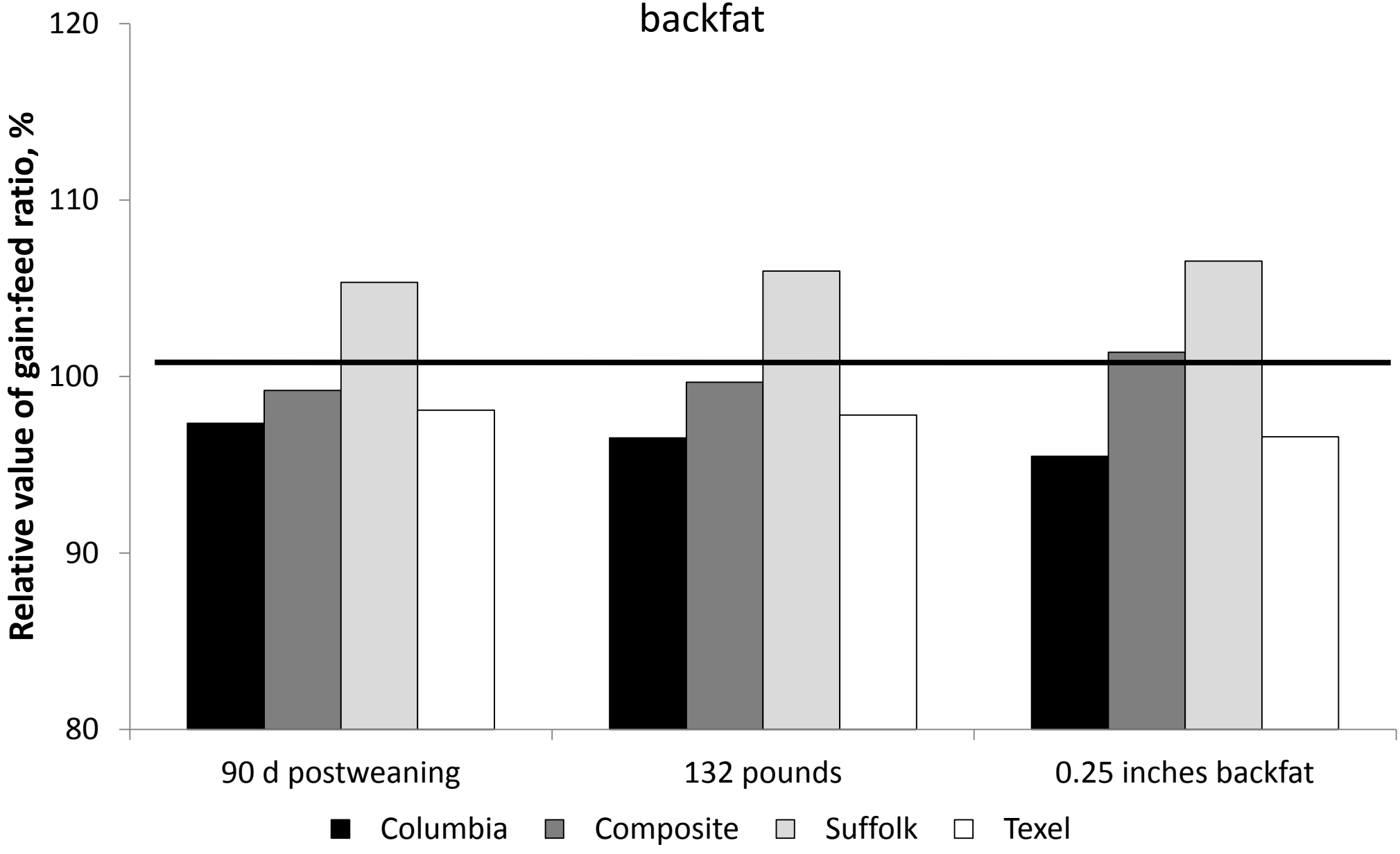
Ultrasound loin muscle area for ewe and wether lambs sired by Columbia, Composite, Suffolk, and Texel rams at 90 days postweaning, 132 pounds live weight, or 0.25 inches of backfat



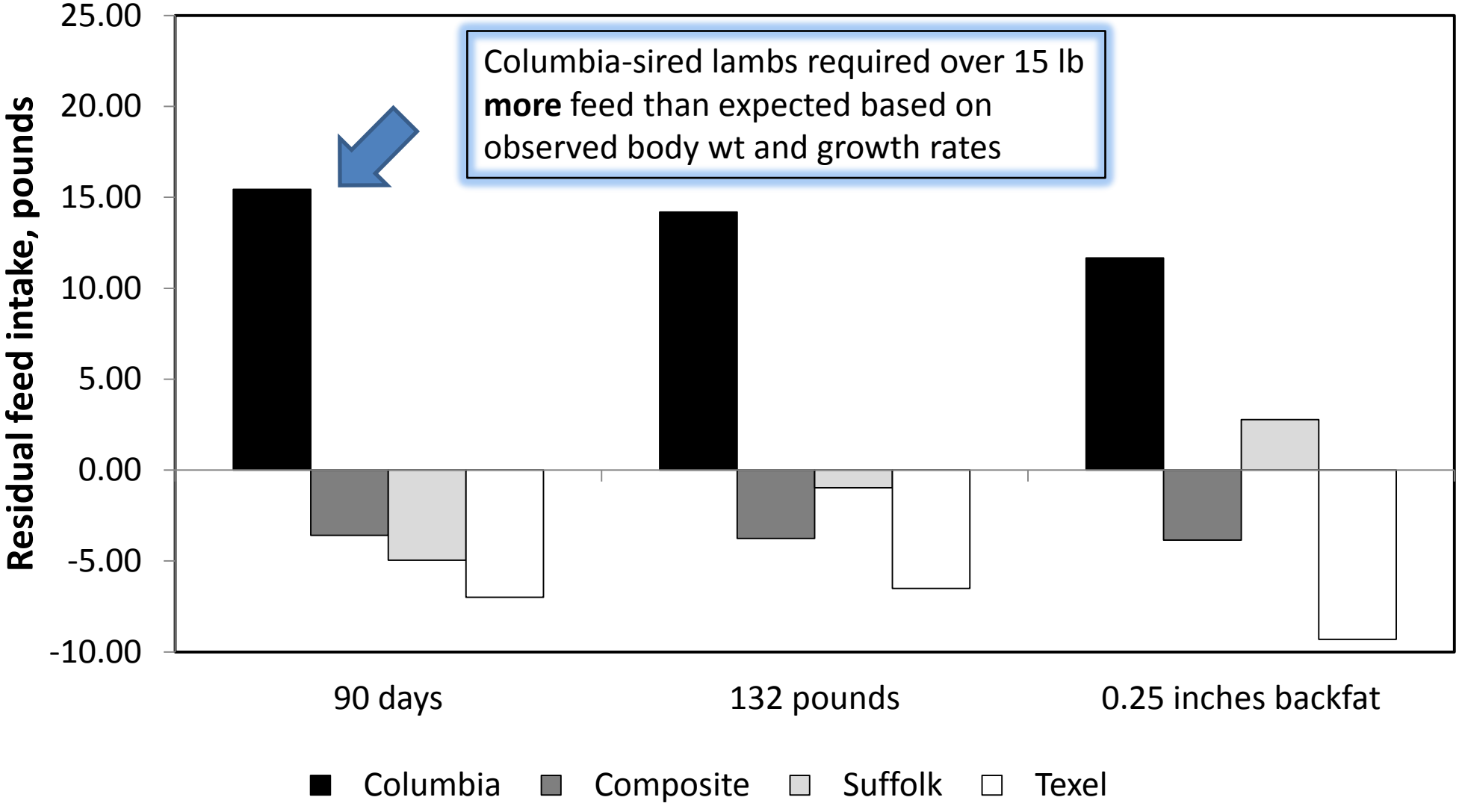
Carcass loin muscle area for wether lambs sired by Columbia, Composite, Suffolk, and Texel rams at age- or weight-constant endpoints



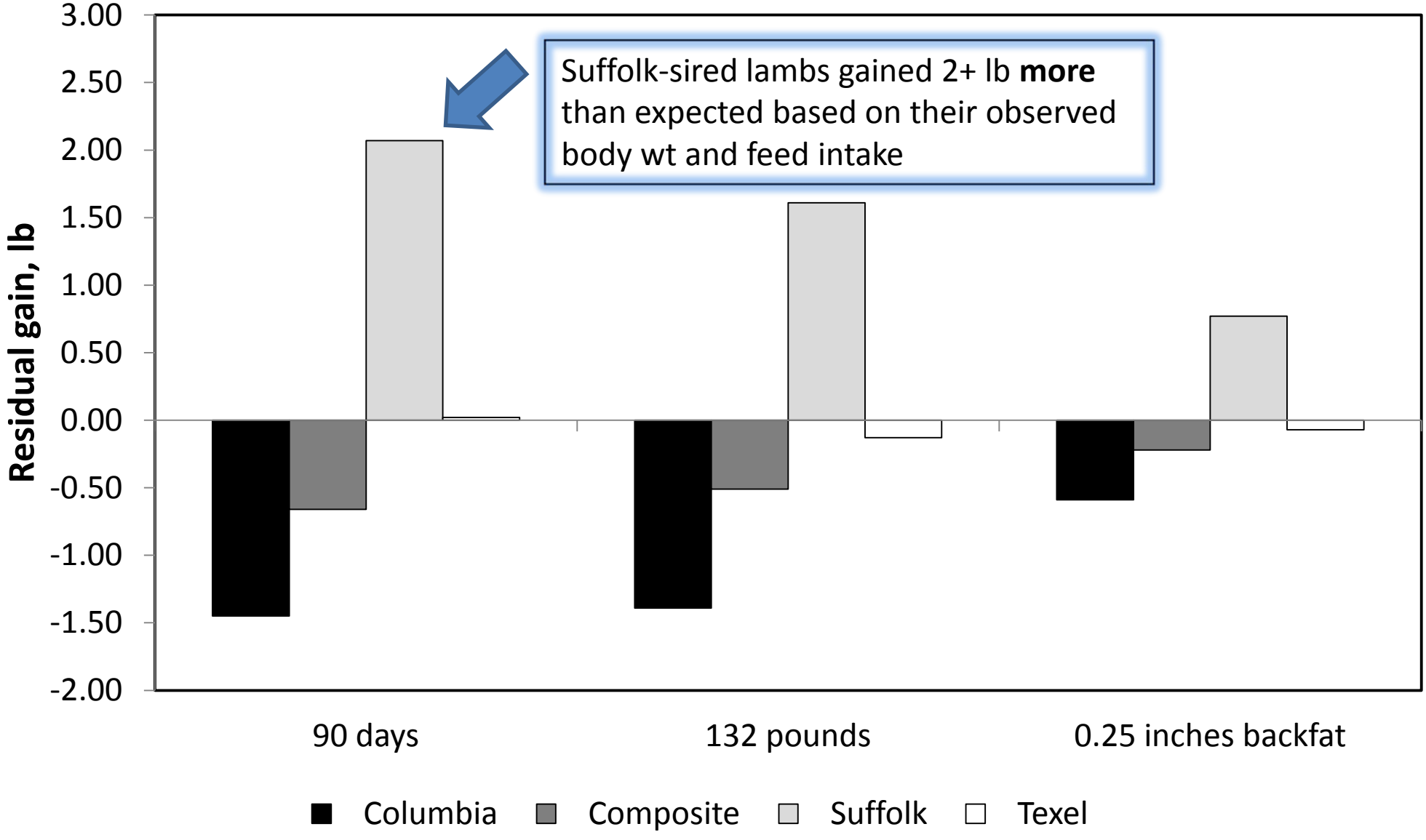
Relative values for gain:feed ratio (overall average = 100; **higher values indicate more efficient growth**) for lambs sired by Columbia, Composite, Suffolk, and Texel rams at 90 days postweaning, 132 pounds live weight, or 0.25 inches of backfat



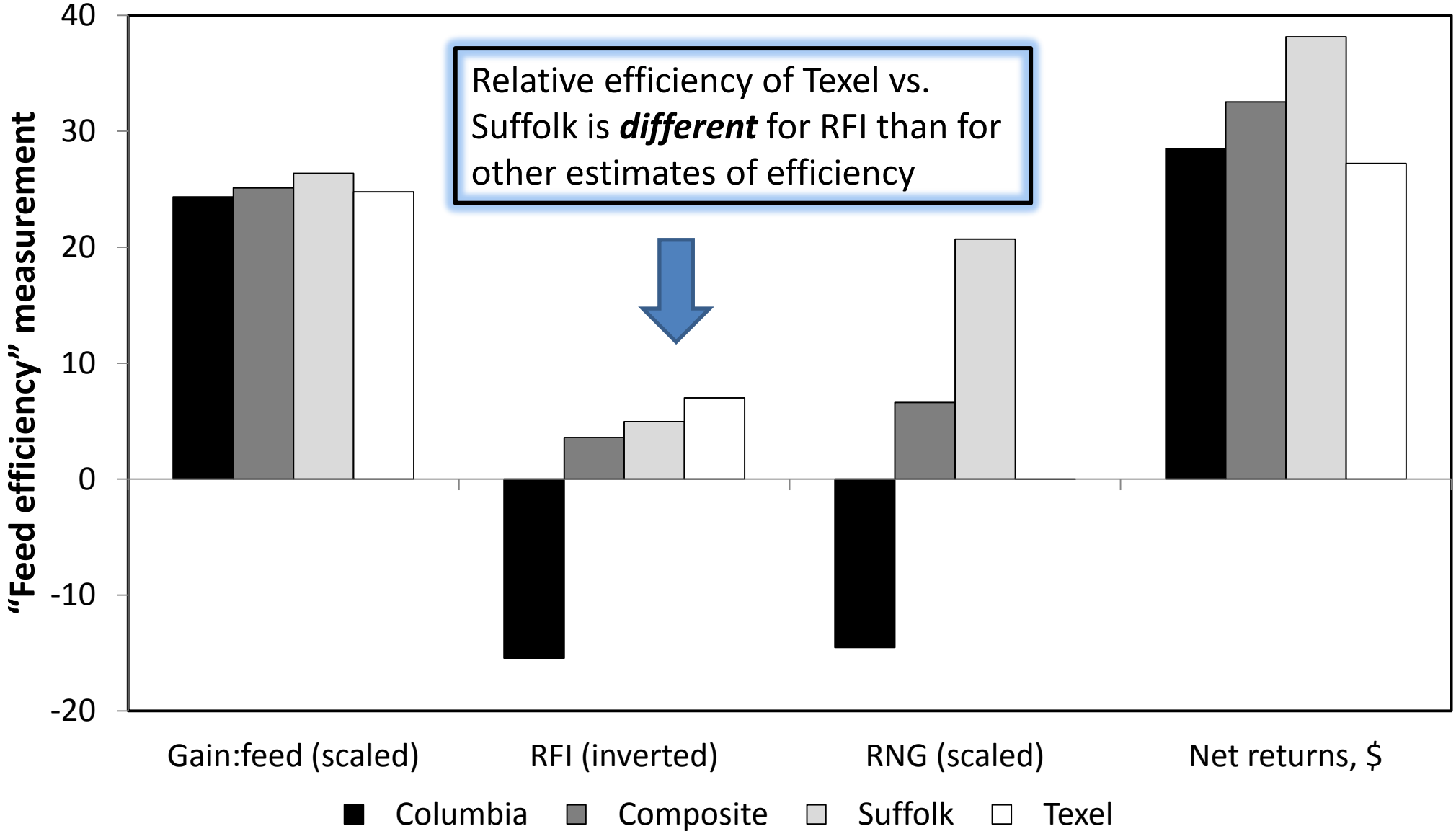
Residual feed intake for lambs sired by Columbia, Composite, Suffolk, and Texel rams at 90 days postweaning, 132 pounds live weight, or 0.25 inches of backfat. ***Low values are superior,*** and indicate that less feed was required given observed body weights and average daily gains



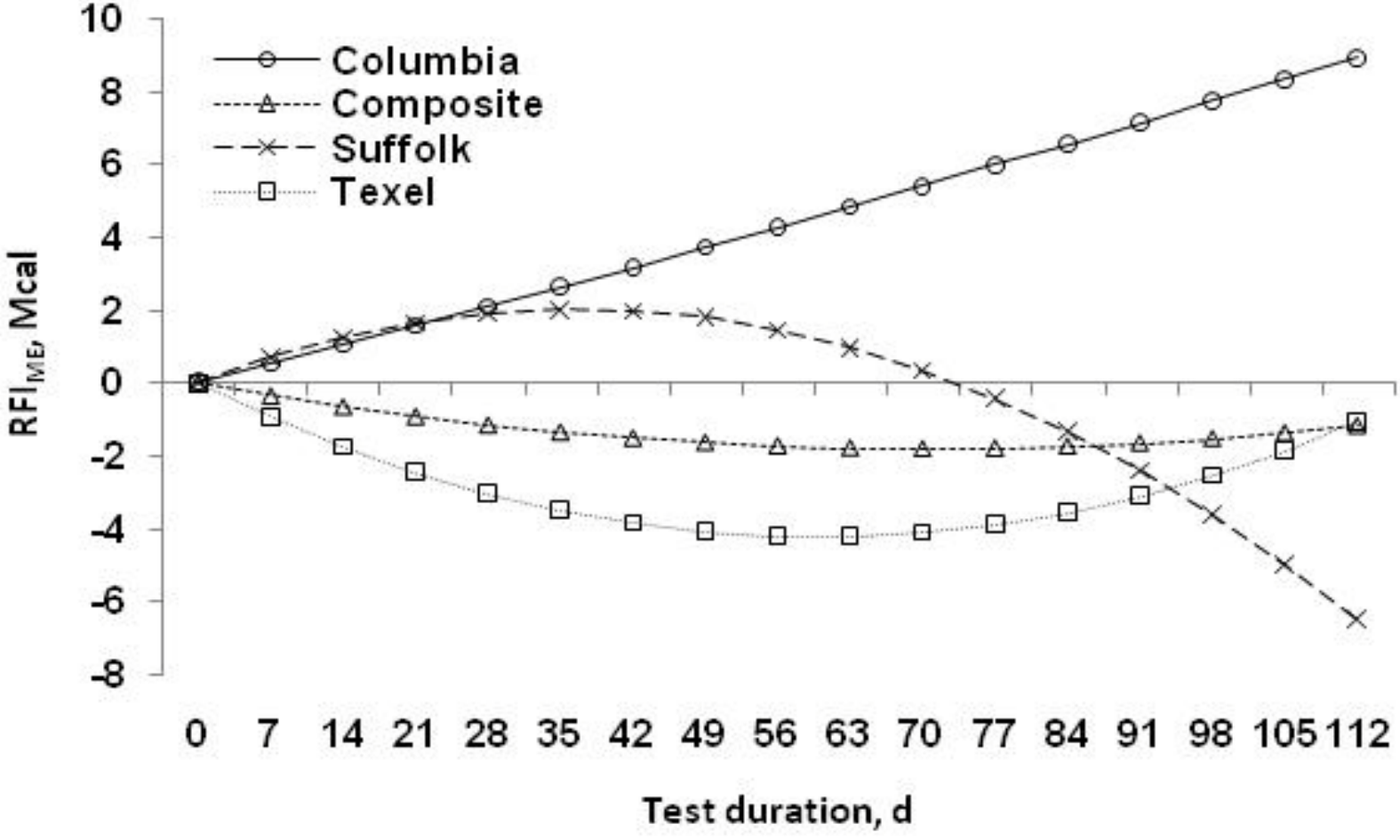
Residual gain for lambs sired by Columbia, Composite, Suffolk, and Texel rams at 90 days postweaning, 132 pounds live weight, or 0.25 inches of backfat. **Higher values are superior,** and indicate more rapid gains at similar body weights and levels of feed intake



Alternative measures of feed efficiency intake for lambs sired by Columbia, Composite, Suffolk, and Texel rams at 90 days on test. Values have been adjusted to equalize the scales, and values of RFI are inverted. Therefore, ***positive values are always superior.***



Cumulative residual feed intake across days on study by lamb sire breed



Selling on a Lamb Pricing Grid

<table>
<tr><th></th><th colspan="5">Yield Grade / Backfat Thickness (in)</th></tr>
<tr><td>Carcass wt, lb</td><td>1
(< 0.16)</td><td>2
(0.16-0.26)</td><td>3
(0.26-0.36)</td><td>4
(0.36-0.46)</td><td>5
(>0.46)</td></tr>
<tr><td><55</td><td colspan="3">- $5 / cwt</td><td>- $15 / cwt</td><td>-$35 / cwt</td></tr>
<tr><td>55-65</td><td rowspan="3">Base</td><td rowspan="2">+ $12/cwt</td><td rowspan="3">-$10 / cwt</td><td rowspan="3">-$30 / cwt</td></tr>
<tr><td>65-75</td></tr>
<tr><td>75-85</td><td colspan="2">Base</td></tr>
<tr><td>➢85</td><td colspan="3">- $20/cwt</td><td>- $30 /cwt</td><td>- $50 /cwt</td></tr>
</table>

Selling on a Lamb Pricing Grid

USSES Terminal Sired Lambs:
4 sire breeds (CO, C3, SU, TX) mated to Rambouillet ewes.
Harvest lambs at wts between 120 and 150 lb.
Where do they fit the Grid?

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<tr><th rowspan="2">Carcass wt, lb</th><th colspan="5">Yield Grade / Backfat Thickness (in)</th></tr>
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(>0.46)</th></tr>
<tr><td><55</td><td colspan="3">- $5 / cwt (1%)</td><td>- $15 / cwt</td><td>-$35 / cwt</td></tr>
<tr><td>55-65</td><td rowspan="3">Base
(23%)</td><td rowspan="2">+ $12/cwt
(70%)</td><td rowspan="3">-$10 / cwt
(4%)</td><td rowspan="3">-$30 / cwt</td></tr>
<tr><td>65-75</td></tr>
<tr><td>75-85</td><td>Base (2%)</td></tr>
<tr><td>➢85</td><td colspan="3">- $20/cwt</td><td>- $30 /cwt</td><td>- $50/cwt</td></tr>
</table>