



San Juan County

WASHINGTON STATE UNIVERSITY
EXTENSION

Oak Knoll Aeration and Over-Seeding Trial 2020

Table 1. Mean and standard deviations (SD) for aeration treatments

Observation	No Aeration	With Aeration	<i>p</i>¹
Forage Quality			
Dry Weight (lbs./acre)			
Without Over-Seeding	5893 ± 430	5174 ± 884	0.235
With Over-Seeding	5074 ± 977	6572 ± 1477	0.128
Crude Protein (%)	7.7 ± 0.49	7.3 ± 0.73	0.235
Relative Feed Value	100.0 ± 4.87	98.2 ± 4.92	0.357
Soil Compaction			
Penetration, Depth (cm)	30.7 ± 4.2	31.8 ± 3.4	0.665

Table 2. Mean and standard deviations (SD) for over-seeding treatments

Observation	No Seeding	With Seeding	<i>p</i>¹
Forage Quality			
Dry Weight (lbs./acre)			
Without Aeration	5893 ± 430	5074 ± 977	0.212
With Aeration	5174 ± 884	6572 ± 1477	0.146
Crude Protein (%)	7.46 ± 0.47	7.54 ± 0.80	0.818
Relative Feed Value	99.8 ± 3.37	99.0 ± 6.26	NA
Soil Compaction			
Penetration, Depth (cm)	30.0 ± 4.8	32.5 ± 2.0	.231

¹The probability value associated with the treatment in the analysis of variance. For observations where a significant treatment effect ($p \leq 0.05$) was indicated, values are highlighted in bold. Values that are not available are indicated as NA.



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Trial Methods

Fall 2017 - Aerated

5/7/18 – Over-seeded with Birds Foot Trefoil at 15 lbs per acre

7/13/18 - Sampled forage biomass and quality

9/11/18 - Sampled soil quality

Fall 2018 - Aerated

6/14/19 - Sampled forage biomass and quality

9/18/19 - Sampled soil quality

6/16/20 - Sampled forage biomass and quality as well as soil compaction

For more information please contact Brook Brouwer at brook.brouwer@wsu.edu.

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Reference: Walton, A. and B. Brouwer. 2020. Oak Knoll Aeration and Over-Seeding Trial 2020. WSU San Juan County Extension Trial Report. <https://extension.wsu.edu/sanjuan/ag-research-reports/>



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