



Oak Knoll Aeration and Over-Seeding Trial 2018

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

Observation	No aeration	With aeration	p^1
Forage quality			
Crude protein, %	8.4 \pm 0.7	8.9 \pm 0.9	0.240
Relative feed value	109 \pm 6	108 \pm 8	0.798
Pasture composition			
Bare ground, %	3 \pm 3	3 \pm 3	0.957
Litter cover, %	19 \pm 9	25 \pm 9	0.259
Grass cover, %	83 \pm 5	79 \pm 6	0.239
Legume cover, %	-	-	-
Without over-seeding	5 \pm 3	8 \pm 5	0.300
With over-seeding	11 \pm 5	3 \pm 2	0.046
Soil characteristics			
Infiltration T1, seconds	93 \pm 27	77 \pm 40	0.180
Infiltration T2, seconds	118 \pm 31	101 \pm 39	0.218
Soil organic matter, %	5.8 \pm 1.9	6.7 \pm 1.4	0.316

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

Observation	No over-seeding	With over-seeding	p^1
Forage quality			
Crude protein, %	8.6 \pm 1	8.7 \pm 0.5	0.855
Relative feed value	111 \pm 6	106 \pm 7	0.192
Pasture composition			
Bare ground, %	4 \pm 3	2 \pm 2	0.158
Bare ground, %	24 \pm 10	20 \pm 10	0.449
Litter cover, %	82 \pm 4	81 \pm 7	0.706
Grass cover, %	-	-	-
Without aeration	5 \pm 3	10 \pm 5	0.116
With aeration	8 \pm 5	3 \pm 2	0.105
Soil characteristics			
Infiltration T1, seconds	101 \pm 29	69 \pm 32	0.018
Infiltration T2, seconds	128 \pm 28	92 \pm 34	0.018
Soil organic matter, %	6.7 \pm 1.3	5.8 \pm 1.9	0.329

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.



San Juan County

WASHINGTON STATE UNIVERSITY
EXTENSION

Trial Methods

Fall 2017 - Aerated

5/7/18 - Over-seeded with Bird's Foot Trefoil at 15 lbs per acre

7/13/18 - Sampled forage biomass and quality

9/11/18 - Sampled soil quality

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