Module 1 Lesson 4 – Conducting Environmental/Surface Inspections

EXERCISE 8 - Calculating Ground, Basal, and Foliar Cover

Instructions:

- This is an individual exercise.
- Imagine you just finished two vegetation surveys for a well site that was reclaimed 10 years ago, because the operator submitted a FAN. One survey was completed for the reclaimed well site with no access road (see attached Cover Data Form Inside Reclamation). The other survey was completed in a nearby undisturbed area for comparison (see attached Cover Data Form Outside Reclamation).
- Review both Cover Data Forms.
- Complete the following tasks for both forms:
 - o Convert the dot-count tallies to actual numbers on both forms.
 - o Calculate the percent ground-level cover for each category (i.e., bare ground, litter, gravel, stone, undesirable species, and desirable species).
 - o Calculate the percent ground cover.
 - o Calculate the percent total foliar cover.
 - o Calculate the percent foliar cover for DV only.
 - o Complete the form to calculate UV composition and DV composition.
- Complete the entire Cover Data Comparison Table using information from both forms.
- At the next webinar, students will be asked a series of questions related to this exercise.

Attachments:

- 1. Reclamation Monitoring Cover Data Form (INSIDE RECLAMATION) (1 page)
- 2. Reclamation Monitoring Cover Data Form (OUTSIDE RECLAMATION) (1 page)
- 3. Cover Date Comparison Table (1 page)

Reclamation Monitoring: Cover Data

Lease: NMNM078987					Well Name: Wallace Fed A 1							
Date: 7/2/2020						Examiner(s): Barbara Hitchell						
Inside Reclamation (x) Outside Reclamation ()						No. of Points: 100						
Ground-Level Cover (Basal Cover)												
Category	B Bare Ground		L Litter		G Gravel (2mm- 10")	S Stone (>10")	UV Undesirable Vegetation		DV Desirable Vegetation		Total # of Sample Points	
Dot Count			⊠⊠·•		Ø		• •					
Total Ground- Level Hits												
% Cover												
					Basal and	d Foliar Cover	r					
Basal Cove (Species))				oliar Cover (Species)			Foliar Hits (Dot Count)		Foliar Hits	Species	
Ground Lev	vel	-	vel 1		Level 2	Level 3		,		(#)	Hits	
			atgrass*			<u> </u>		፟፠:				
Galleta			D /					وسو يحيز				
B, C, G	. *	Sand	Sand Dropseed			 		Ø.7.				
Musk Thistle			U-wing Calthud			 		•				
Sand Dropse B	<u>ed</u>		4-wing Saltbush Cheatgrass*		Galleta	4-wing Saltbush		• •				
		Chealgrass Galleta			Dallela	4-wing sails	9-wing Sailbush					
В, С, G В, С		4-wing Saltbush				<u> </u>		⊗ i•				
В, С		9-wing Sailbush						• •				
		 						1				
		-									+	
			+								+	
			1									
											+	
					-							
							Folia	ar Cover T	fotal:			
% Ground Cover: % Foliar Cover:					DV Composition: UV* Composition:							
(% Cover excluding Bare Ground) (Foliar Hits / Total Sample Pts.)					(DV Foliar Hits / Total Species Hits) (UV Foliar Hits / Total Species Hits)							
% %				%	%							

Notes: Use other side or another page; [Species] = greater than 20 feet high; UV species marked with an "*"

Reclamation Monitoring: Cover Data

Lease: NMNM078987					Well Name: Wallace Fed A 1							
Date: 7/2/2020						Examiner(s): Barbara Hitchell						
Inside Reclamation () Outside Reclamation (x)						No. of Points: 100						
				Ground-L	evel (Cover (Basal (Cover)					
Category	B Bare Ground		L Litter	Grav (2m) 10"	vel m-	S Stone (>10")	UV Undesirable Vegetation		DV Desirable Vegetation		Total # of Sample Points	
Dot Count	这		\(\overline{\ove		<u>* </u>	•						
Total Ground- Level Hits	<u> </u>		<u> </u>			<u> </u>						
% Cover											<u> </u>	
				Bas	al and	d Foliar Cover	r					
Basal Cove (Species))			Foliar Cover (Species)		Lavals	Folia (Dot 0		ount) Hits		Total Species Hits	
Ground Lev	vel		evel 1	Level 2		Level 3	<u> </u>			(#)	Пісь	
Callata	!		alleta Divinent				፟ 🔯 🖰			 		
Galleta L, G	!		Dropseed					⊠ଘ		 		
C, G Sand Dropse		Sanu	Dropseed			<u> </u>		٠ الحا				
Sand Dropse Sand Dropse		4-win(g Saltbush					•		 	+	
B, L	384	· · · · · · · ·	alleta			Ö		⊠ l:	——			
		-	alleta	Juniper		<u> </u>		溪 ,	——		+	
			uniper	Jany				Zi N			_	
Mutton gra		,	riper					•	\longrightarrow		+	
L	7,7	Cli	iffrose					7.				
L	——		alleta	Sand Drop	bseed	[Pinyon]	7	•	—			
<u> </u>		+	ton grass	Juniper		<u> </u>		īī			_	
<u> </u>			atgrass*					• •			+	
			1								_	
											<u> </u>	
											<u> </u>	
							Folia	ar Cover T	Гotal:			
% Ground	d Cov	er:	% Fol	liar Cover:	:	DV Composition: UV* Composition:						
(% Cover excluding		Ground)	(Foliar Hits /	/ Total Sample	: Pts.)							
%				%	<i>y</i>	% %					%	

Notes: Use other side or another page; [Species] = greater than 20 feet high; UV species marked with an "*"

Cover Data Comparison Table

	Reclaimed Area (%)	Unreclaimed Area (%)	Comparison (%)*
Ground Cover			
DV Basal Cover			
UV Basal Cover			
Total Foliar Cover			
Total Foliar Cover for DV			
DV Composition of Foliar Cover			
UV Composition of Foliar Cover			

^{*}For comparison: (RA/UA) x 100