Setting up Field Study Site - Protocol Test

Date S Performance t Is measured d Performance e Is measured d Verifying t Student activity & Level of Performance n + appropriate student performance m - inappropriate student performance e n.a. not appropriate or not observed n												
Determining Pace												
Lay out 30+ meter measuring tape												
Start with toe at 0-meter mark												
Use normal strides; measure distance of 10 paces												
Calculate distance of one pace												
Repeat three times; calculate average pace; record												
Determining Paces in Half the Diagonal of Pixel												
Use measuring tape & lay out 21.2 meters												
Start with toe at 0-meter mark												
Use normal stride; count # of paces to travel entire distance	/											
Repeat three times; calculate average												
Round paces to nearest 1/2 pace.												
Record # of paces for each individual												

Biometry Protocol Test

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n.a. not appropriate or not observed	+		\dashv	\rightarrow	\dashv				 			<u> </u>	<u> </u>			<u> </u>	<u> </u>
Quantitative Land Cover - Canopy		\square	\square	$ \rightarrow $		$ \rightarrow $	 				ا ا			⊢	$ \square$	\vdash	' ا
Hold densiometer vertically with metal nut/washer directly below the intersection of the crosshairs		/															
Look directly up at canopy; record vegetation that touches the crosshairs (+, -, S ky)																	
Record canopy type (Evergreen / Deciduous)	$\overline{\nabla}$														Ţ		
Describe, sketch, or identify tree species																	I
Continue for each pace along diagonal of study site																	
Quantitative Land Cover - Ground Cover																	
Look down; record vegetation (Green, Brown, -)																	1
Identify as graminoid (GD), forb (FB), other (OG)															Ţ		1
Continue for each pace along diagonal of study site																	L
Determine Dominant / Co-Dominant Vegetation																	
Fill out summary tables																	1
Determine dominant land cover (tree, herb)																	1
Identify dominant & co-dominant species appropriate for MUC coding																	1

Tree Circumference & Height Protocol Test

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Tree Circumference		/	/										
Stand on level ground with object being measured													
Choose 5 trees of dominant species that reach the canopy (choose tallest, shortest & midrange)		/											
Measure & record circumference (cm) for each tree at height of 1.35m; record	/	/	$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$										
Repeat measurements for other tree species if < 5 trees of dominant species	/	/	\mathbf{i}										
Tree Height	$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$	/											
Stand on level ground with object being measured	/	/	/										
Measure & record height of eyes from the ground	/	/	/										
	/	/	/										
Sight object through clinometer straw; move away from base of tree until clinometer reads 30° - 60°		/	/										
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Graminoid Biomass Protocol Test

Date S Performance t Is measured u Level of e Performance n (see below) n Student activity & Level of Performance a + appropriate student performance m - inappropriate student performance e n.a. not appropriate or not observed return of the served													
Collecting Graminoid Biomass													I
Blindfolded partner throws beanbag within site													l
Mark 1-meter square around beanbag													
Clip all vegetation within square to ground level													
Collect clippings (avoid unattached leaves / litter)													
Sort clippings into green/brown; put in labeled bags													
Repeat two more times; do not combine clippings													
Calculating Biomass	/	/	/										
Set temperature of drying oven $(50^{\circ} - 70^{\circ} \text{ C})$		/	/										I
Put labeled bags in drying oven			/										I
Mass each bag once a day; record (g); continue until mass is same two days in a row			/										1
Shake out contents of bag; mass empty bag; record			/										l
Calculate, & record Graminoid Mass:													l
Mass of vegetation = total mass - mass of empty bag													
Calculate average Green graminoid mass													
Calculate average Brown graminoid mass	/	/	/										