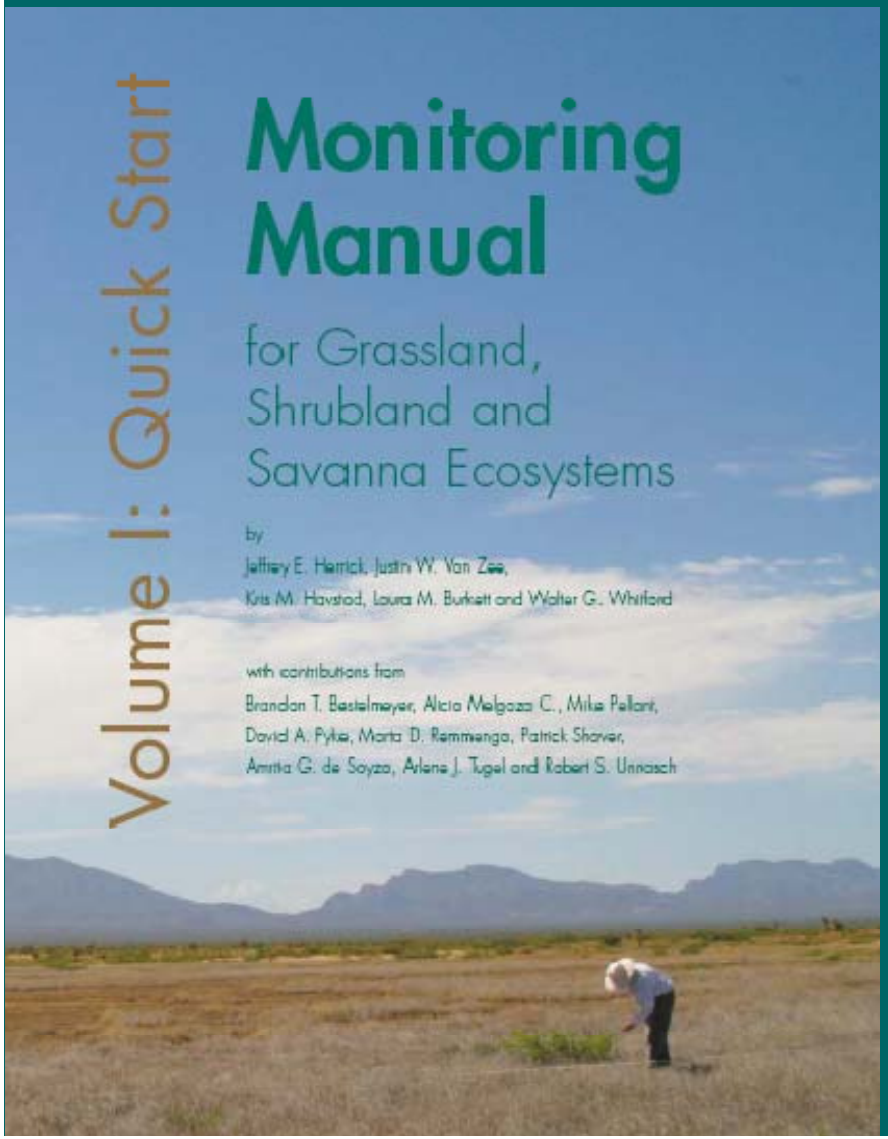
Quantitative methods intro for field exercise



Line point intercept

Line Point Intercept: page 11

Pt.	Top canopy	Lower canopy layers			Soil surface
		Code 1	Code 2	Code 3	
1	Fescue	Bluegrass	Clover	L	R
2	Fescue	L			Fescue
3	Fescue	L			S
etc.					

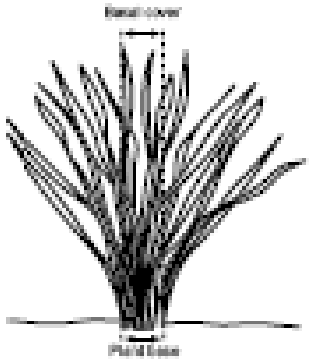
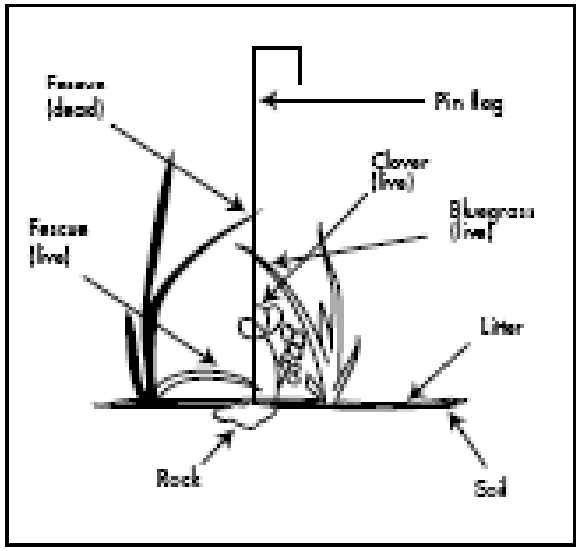
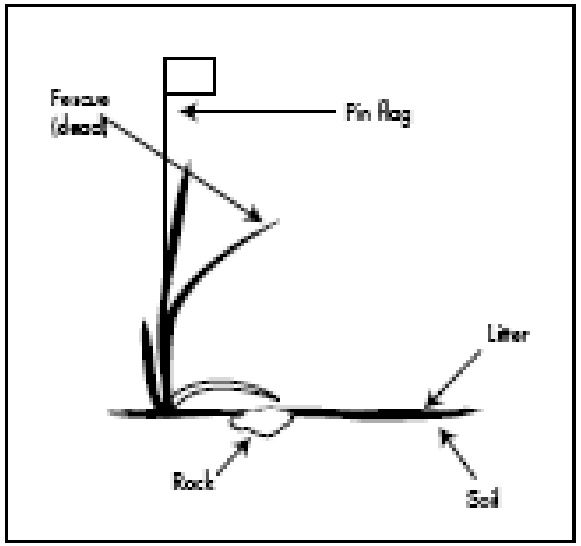


Figure 8. Area defined as plant base and included as basal cover.

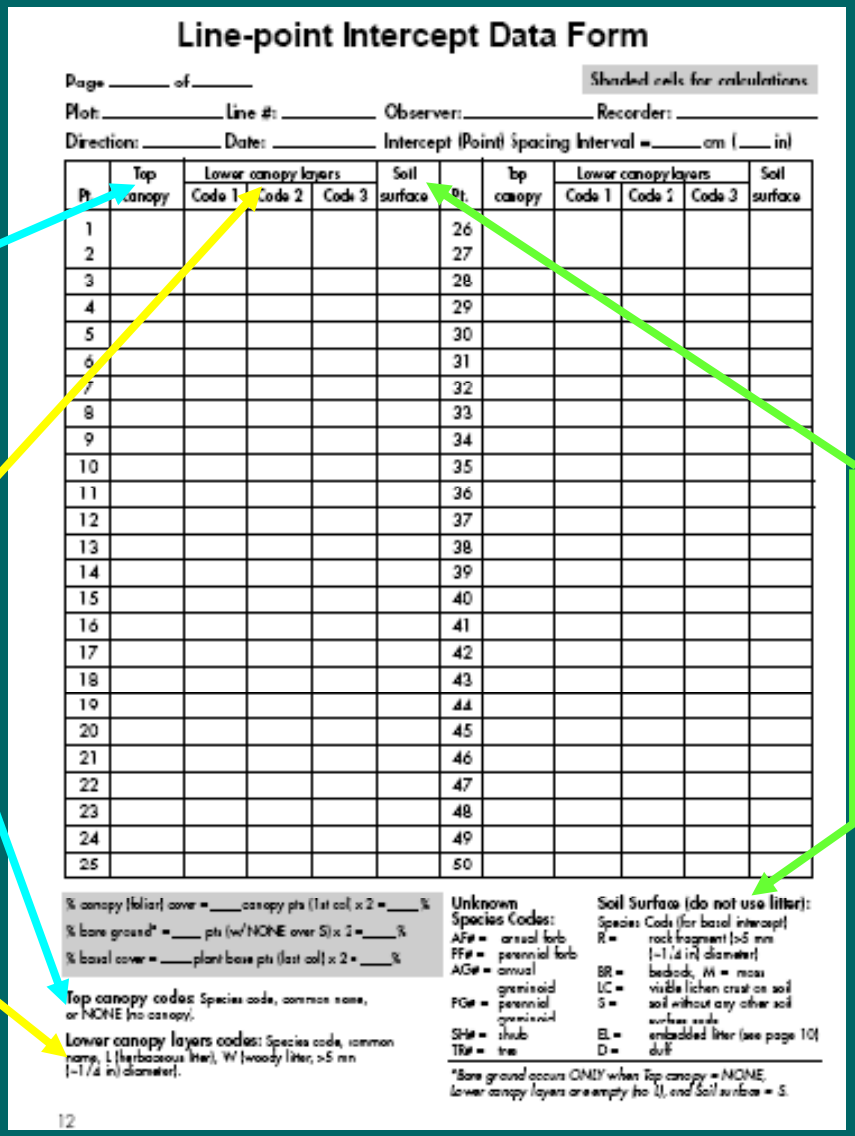


Point 1



Point 2

Line Point Intercept: page 12



Line-point Intercept Data Form

Page ____ of ____ Shaded cells for calculations

Plot: ____ Line #: ____ Observer: ____ Recorder: ____

Direction: ____ Date: ____ Intercept (Point) Spacing Interval = ____ cm (____ in)

Pt	Top canopy	Lower canopy layers Code 1	Code 2	Code 3	Soil surface	Pt.	Top canopy	Lower canopy layers Code 1	Code 2	Code 3	Soil surface
1						26					
2						27					
3						28					
4						29					
5						30					
6						31					
7						32					
8						33					
9						34					
10						35					
11						36					
12						37					
13						38					
14						39					
15						40					
16						41					
17						42					
18						43					
19						44					
20						45					
21						46					
22						47					
23						48					
24						49					
25						50					

% canopy (foliar) cover = ____ canopy pts (1st col) x 2 = ____ %

% bare ground* = ____ pts (w/ NONE over S) x 2 = ____ %

% basal cover = ____ plant base pts (last col) x 2 = ____ %

Top canopy codes: Species code, common name, or NONE (no canopy).

Lower canopy layers codes: Species code, common name, L (herbaceous litter), W (woody litter, >5 mm (1-1/4 in) diameter).

Unknown Species Codes:
AF# = annual forb
FF# = perennial forb
AG# = annual graminoid
PG# = perennial graminoid
SH# = shrub
TR# = tree

Soil Surface (do not use litter):
Species Code (for basal intercept)
R = rock fragment (>5 mm (1-1/4 in) diameter)
BR = bedrock, M = moss
LC = visible lichen crust on soil
S = soil without any other soil surface code
EL = embedded litter (see page 10)
D = duff

*Bare ground occurs ONLY when Top canopy = NONE, Lower canopy layers are empty (no 2), and Soil surface = S.

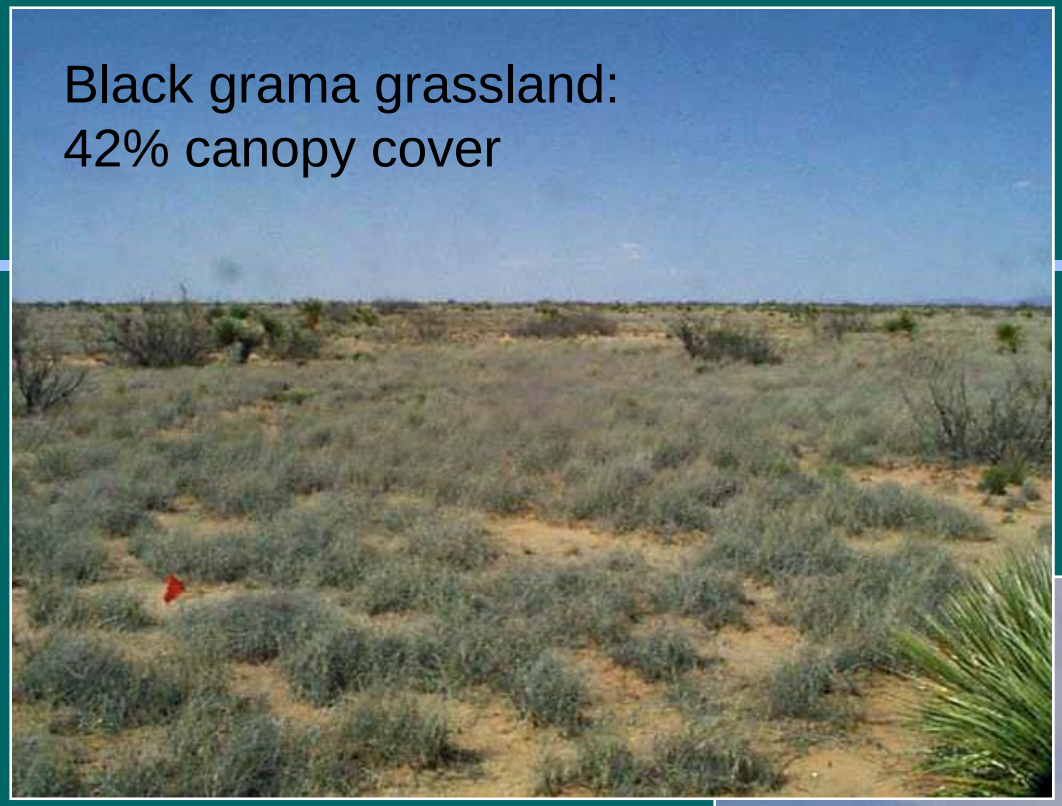
12

Top canopy column: plant name or "NONE"

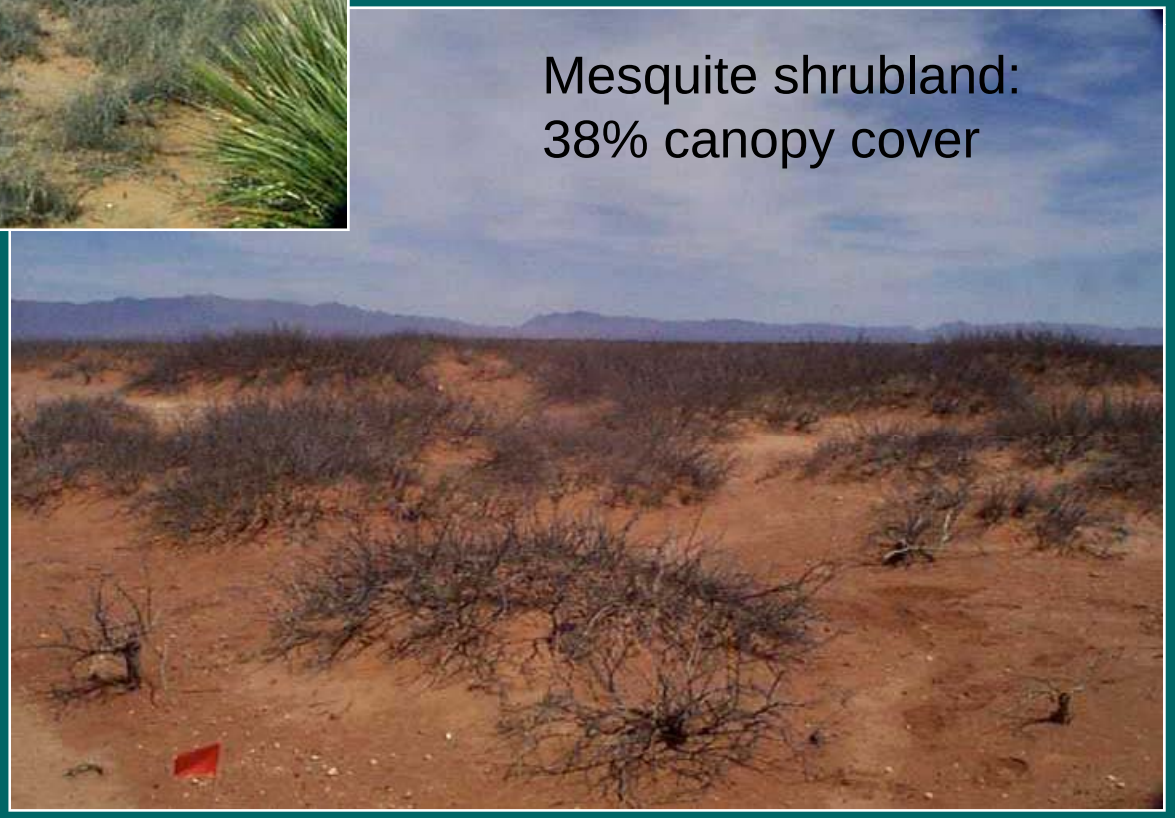
Lower canopy columns (2-4): plant name, L or W

Soil surface column (5): plant name, R, BR, M, LC, S, EL or D

Gap Intercept



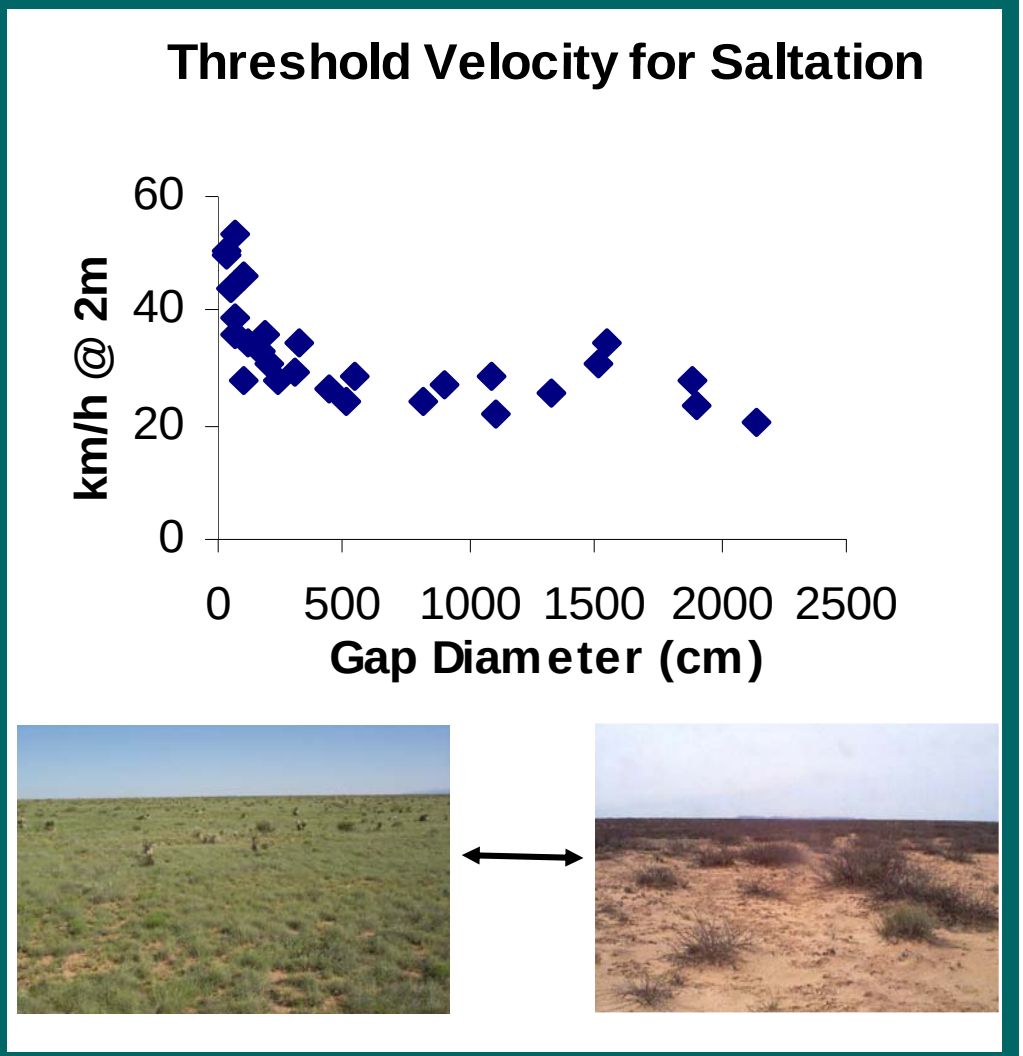
Black grama grassland:
42% canopy cover

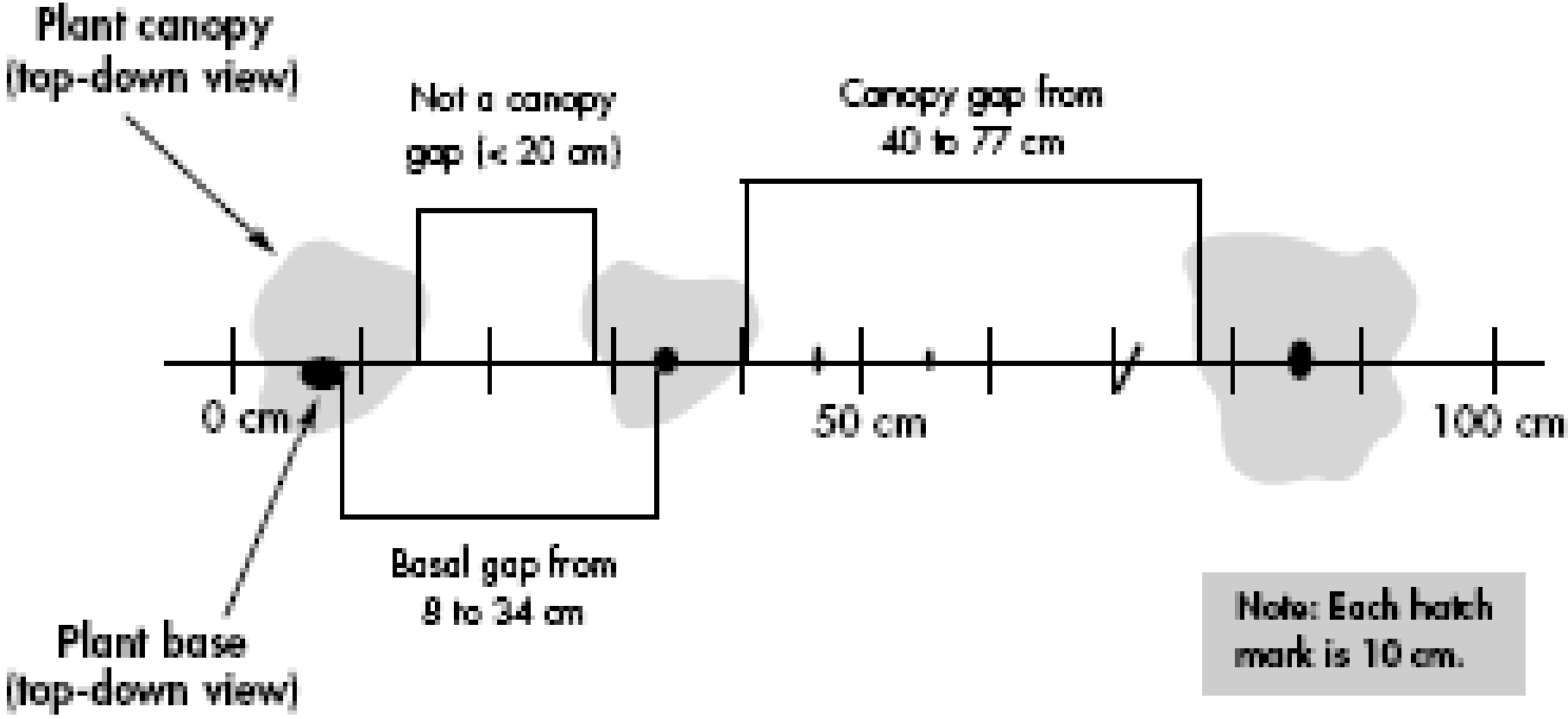


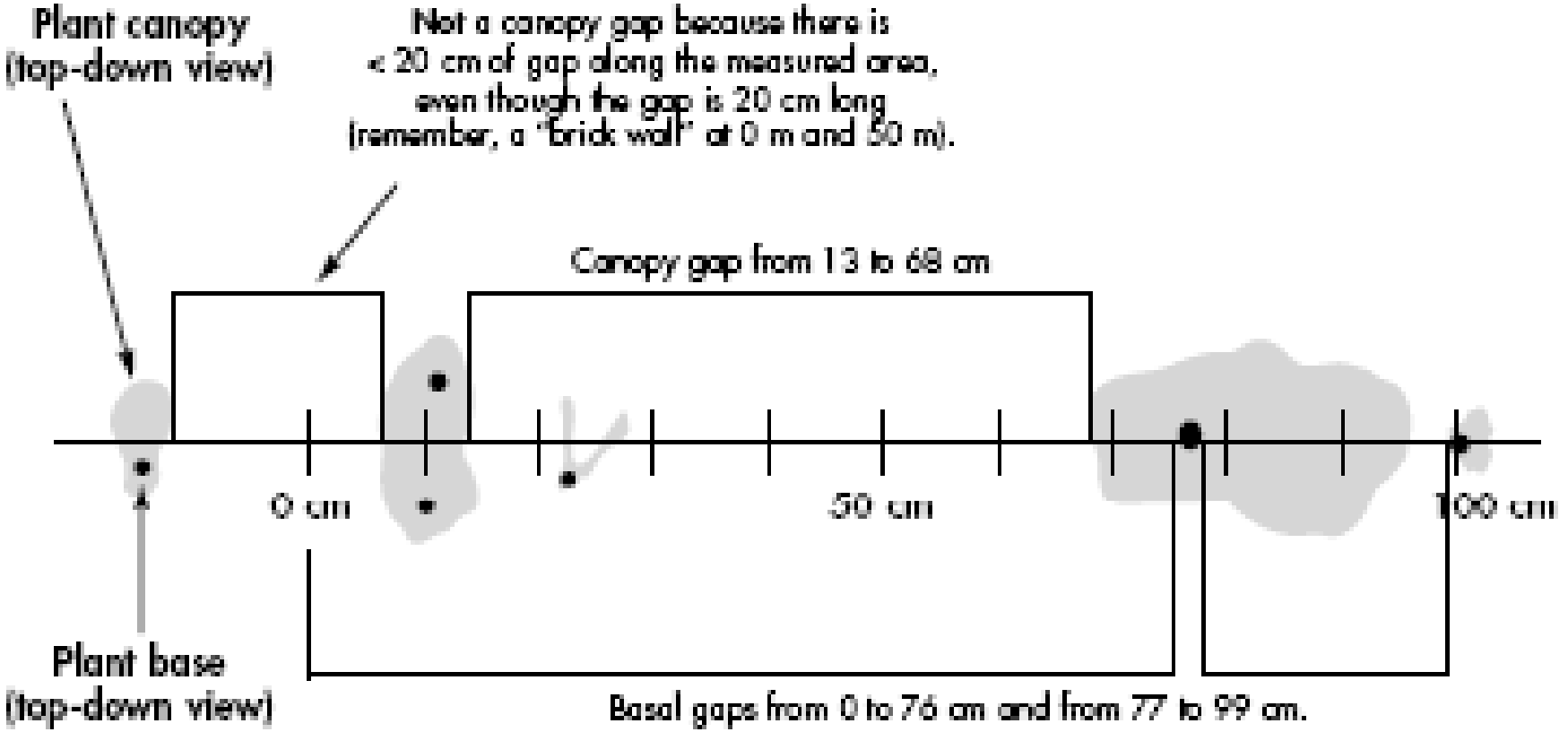
Mesquite shrubland:
38% canopy cover

Calibration example (gap intercept method)

Wind erosion thresholds are often crossed during shrub invasion as gap sizes increase




Plant canopy
(top-down view)
Not a canopy
gap (< 20 cm)
Canopy gap from
40 to 77 cm
0 cm
50 cm
100 cm
Basal gap from
8 to 34 cm
Plant base
(top-down view)
Note: Each hatch
mark is 10 cm.



Note: Each hatch mark is 10 cm.

Gap Intercept Data Form

Monitoring plot: Line: Date: Shaded cells for calculations

Reader: ______ Recorder: ______ Line Length ____ m or ft Page ____ of ____

Circle one: includes only perennial vegetation OR includes annual and perennial vegetation													
Canopy gaps: Minimum size = ___cm (___ft)							Basal gaps: Minimum size = ___cm (___ft)						
Starts	Ends	Gap (cm)	25-50	51-100	101-200	>200	Starts	Ends	Gap (cm)	25-50	51-100	101-200	>200
		size (ft)	1-2	2.1-3	3.1-6	>6			size (ft)	1-2	2.1-3	3.1-6	>6
SUM (cm/ft)							SUM (cm/ft)						
LINE LENGTH (cm/ft)							LINE LENGTH (cm/ft)						
SUM ÷ LINE LENGTH							SUM ÷ LINE LENGTH						
			x 100	x 100	x 100	x 100				x 100	x 100	x 100	x 100
% of line in gaps							% of line in gaps						

Gap intercept


CRUCE DE ZORRILLOS