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Chapter XI, Pueblo Settlement Patterns

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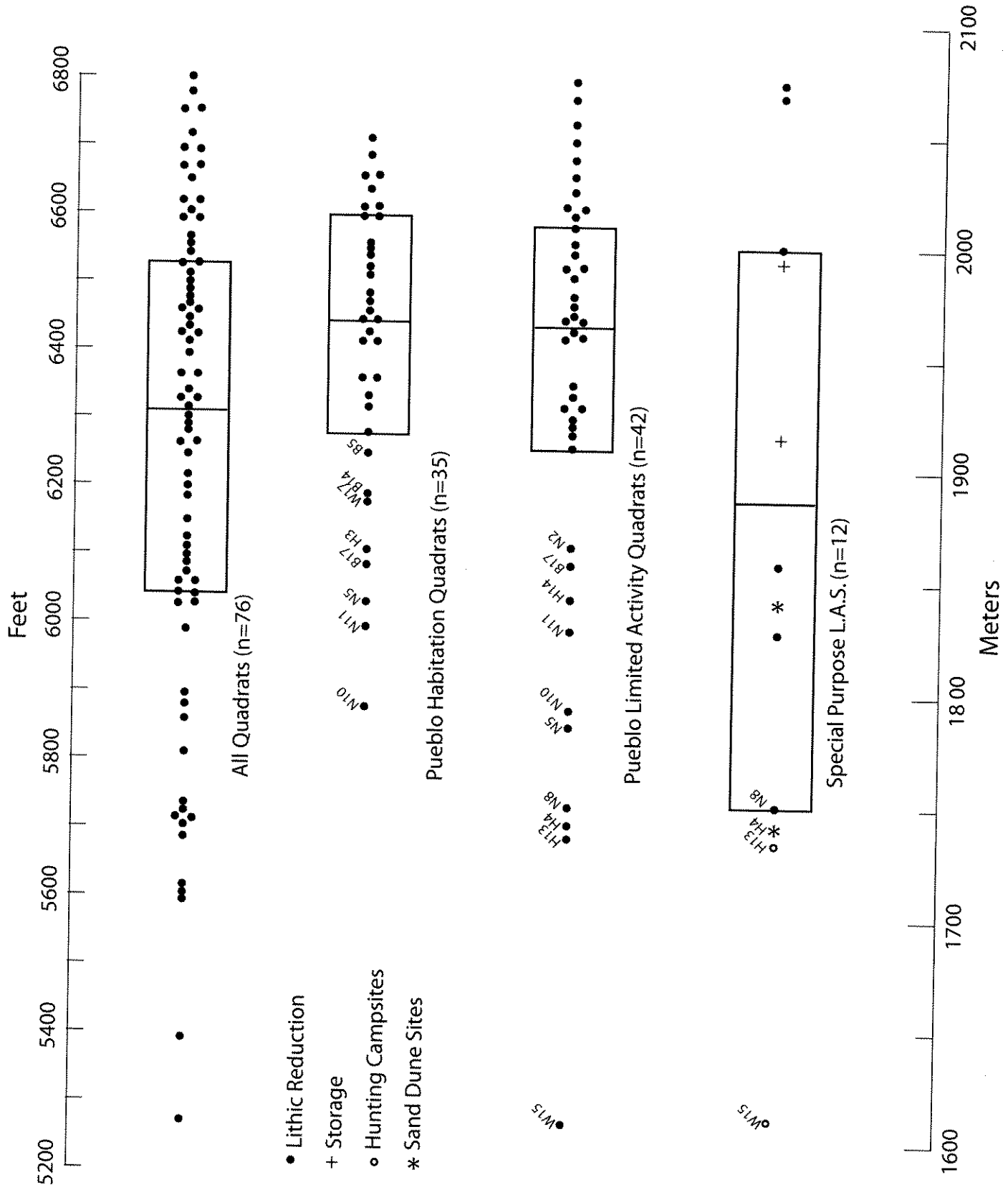


Figure XI-1

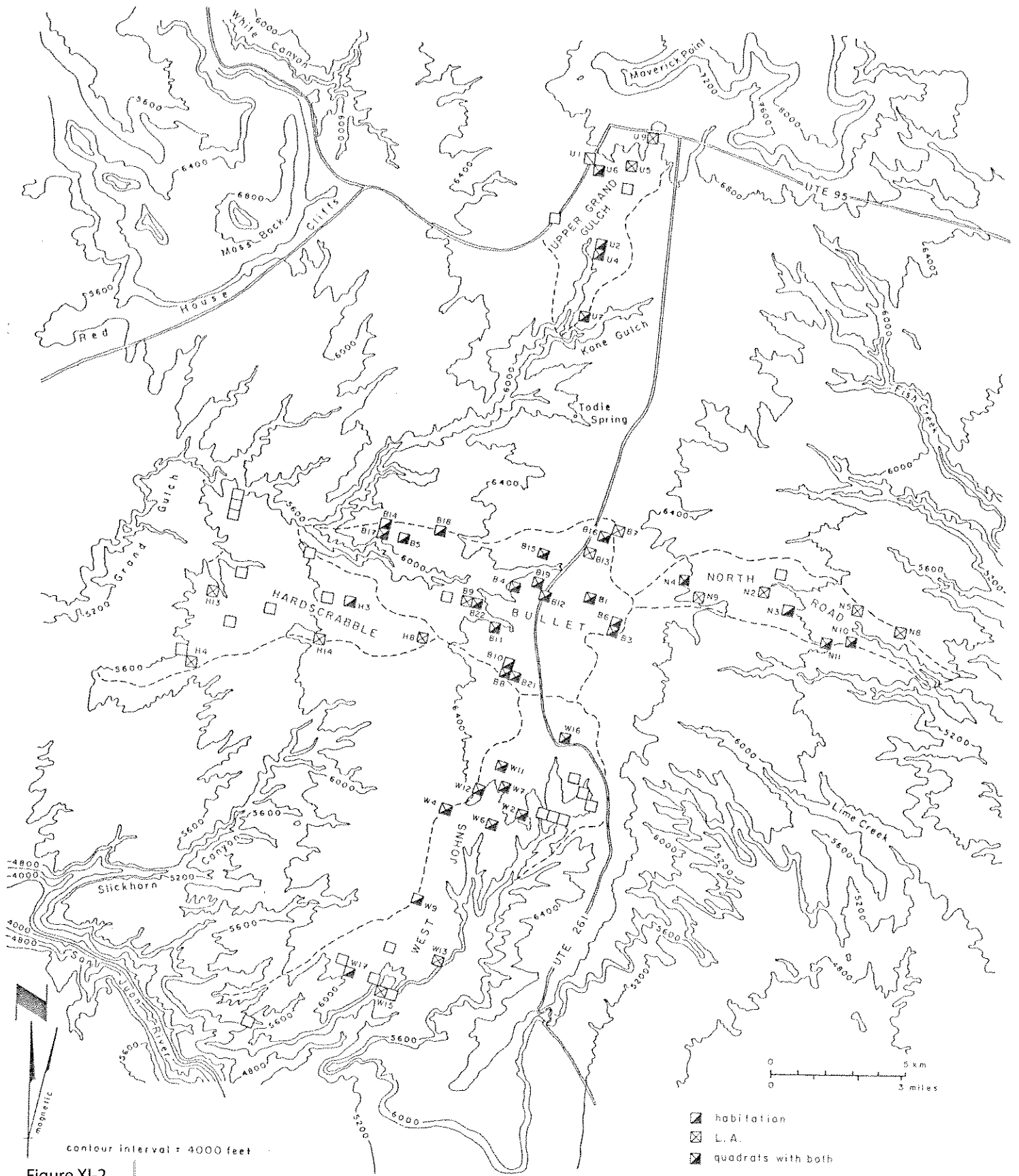


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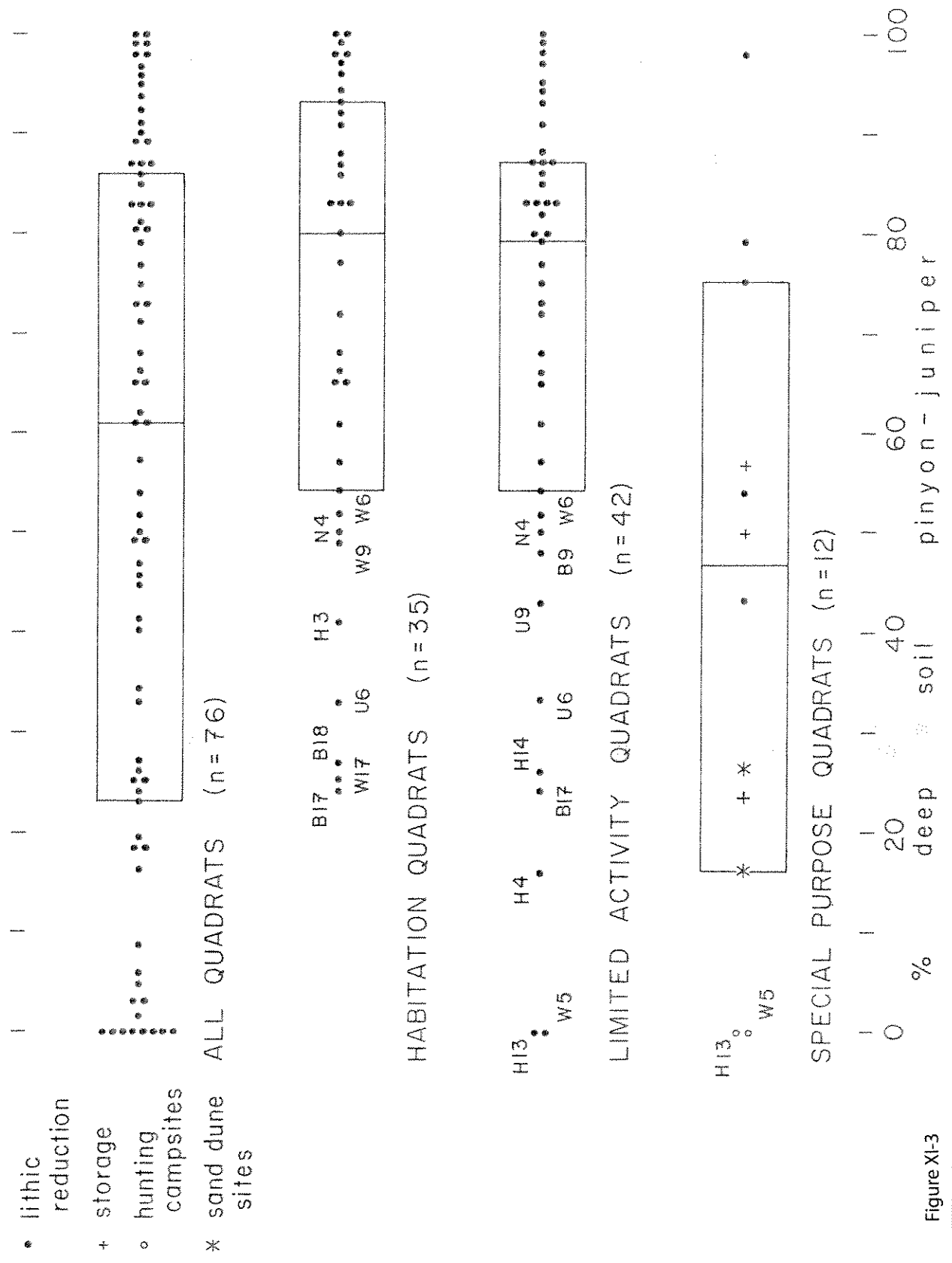
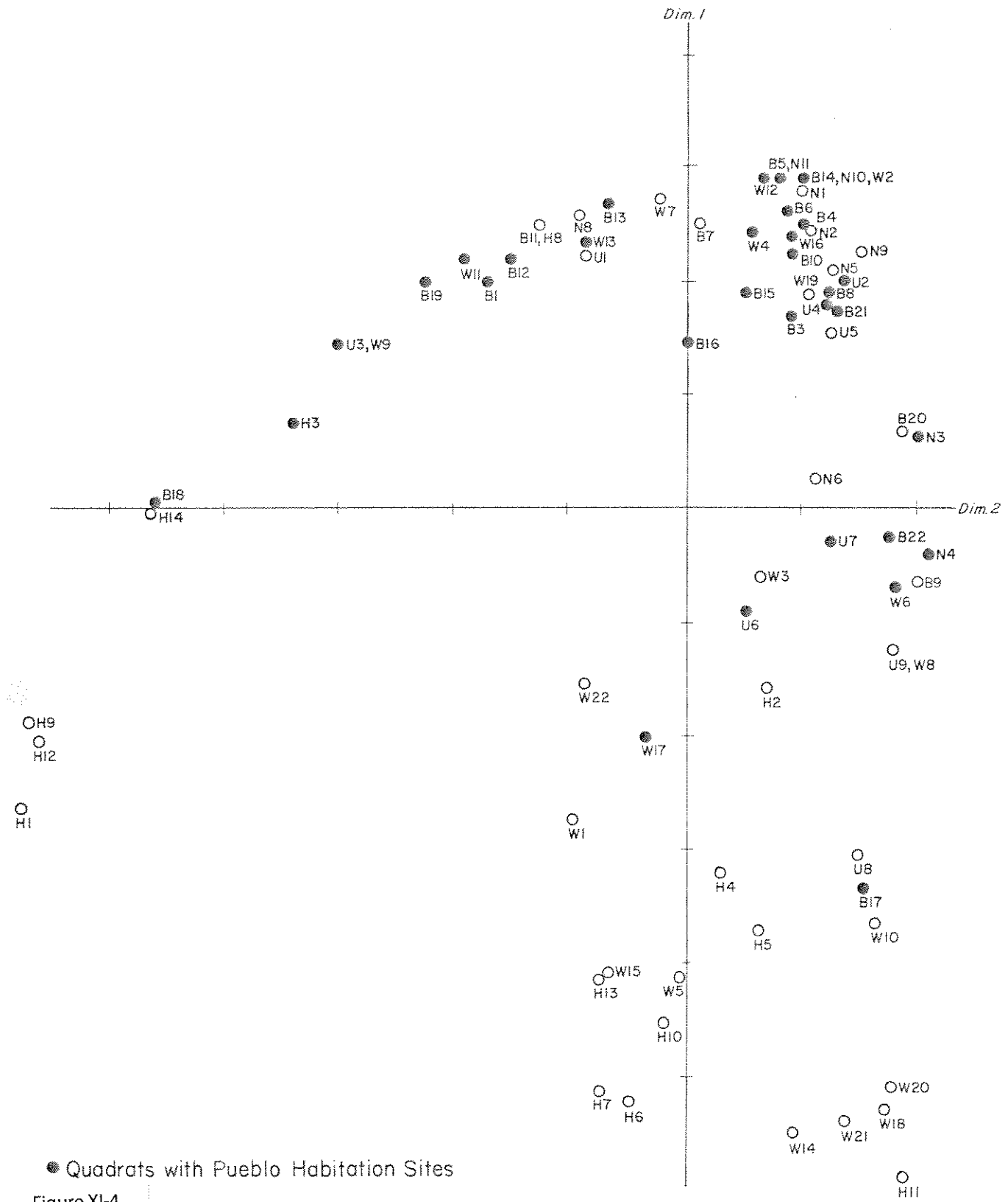
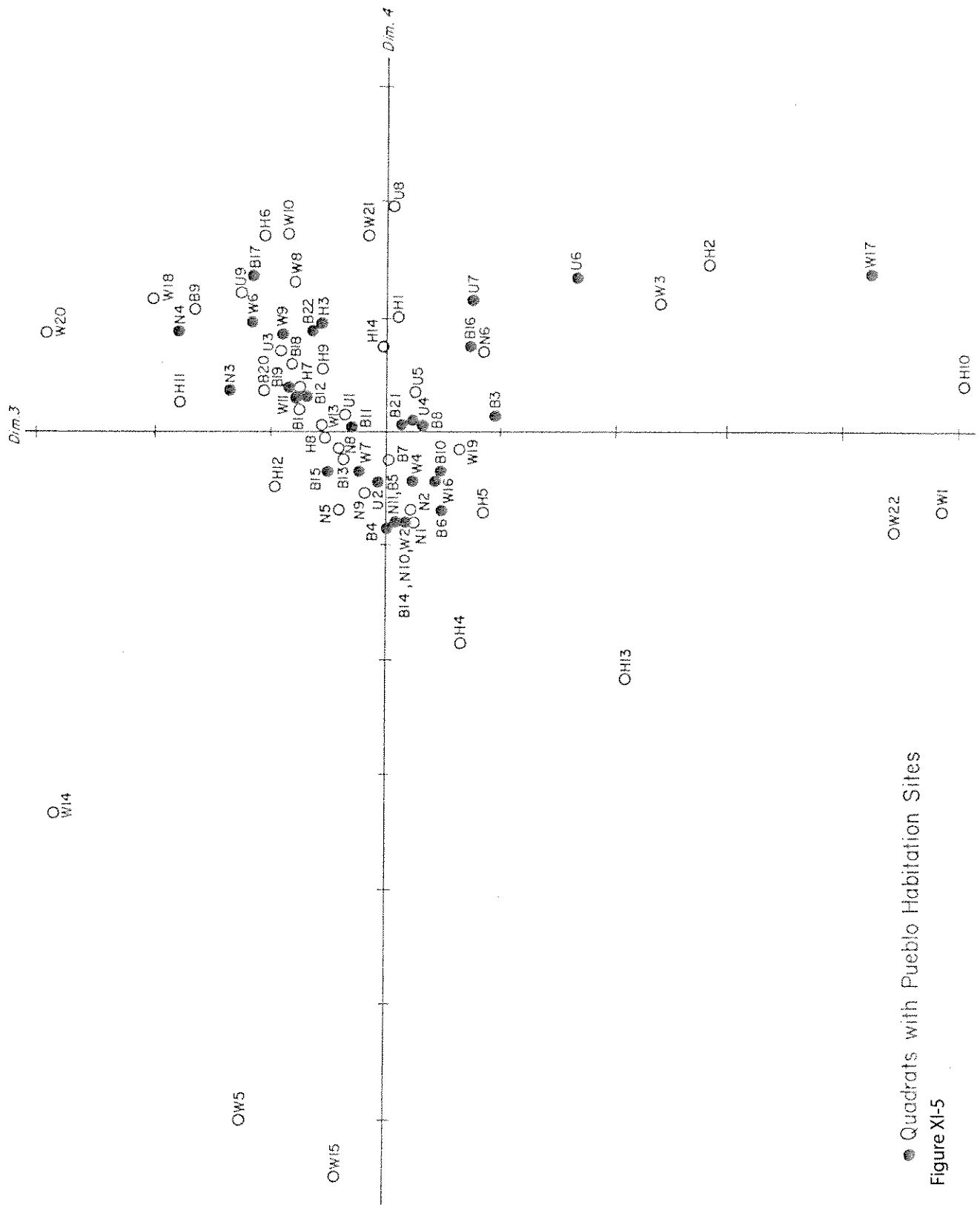
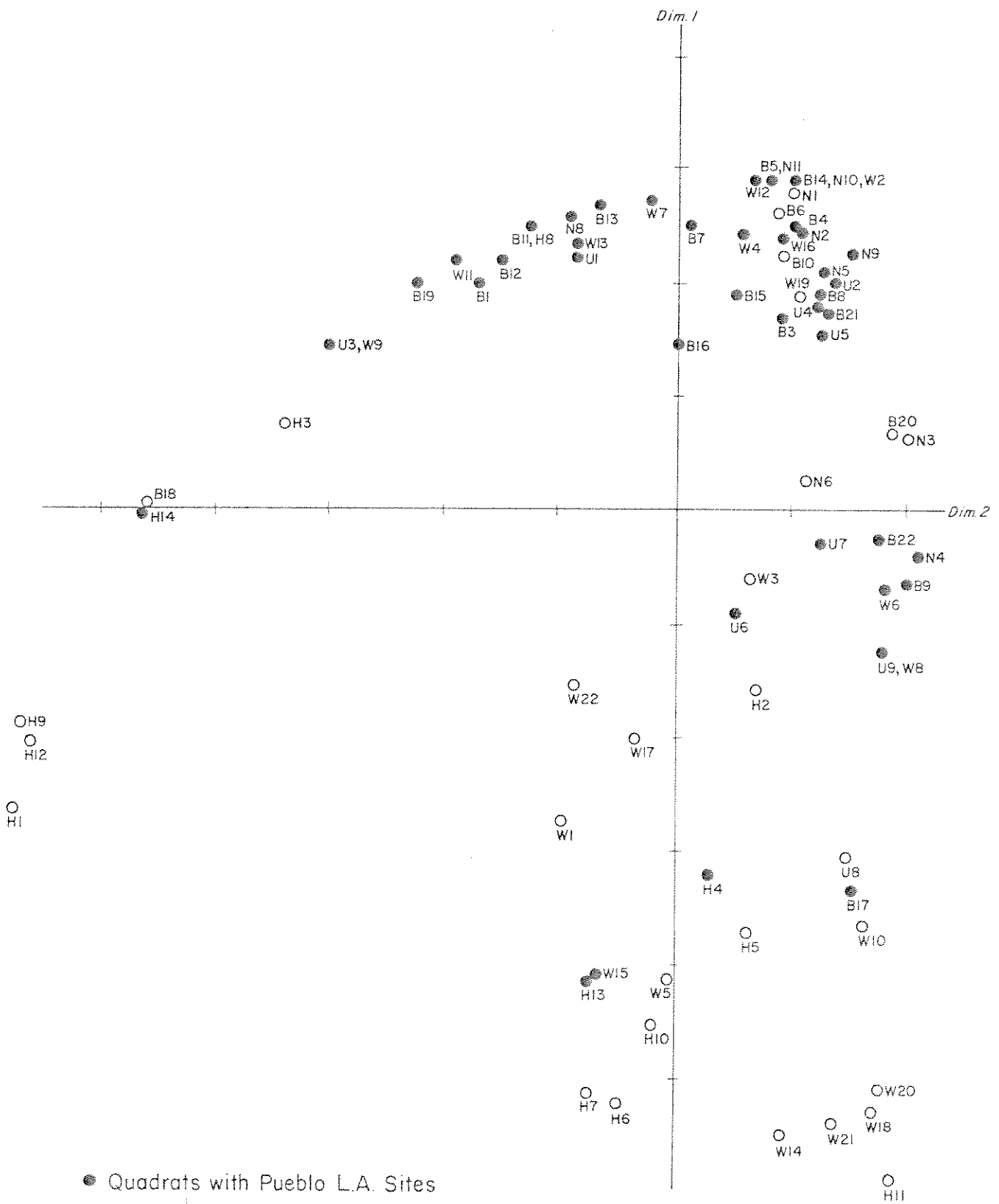


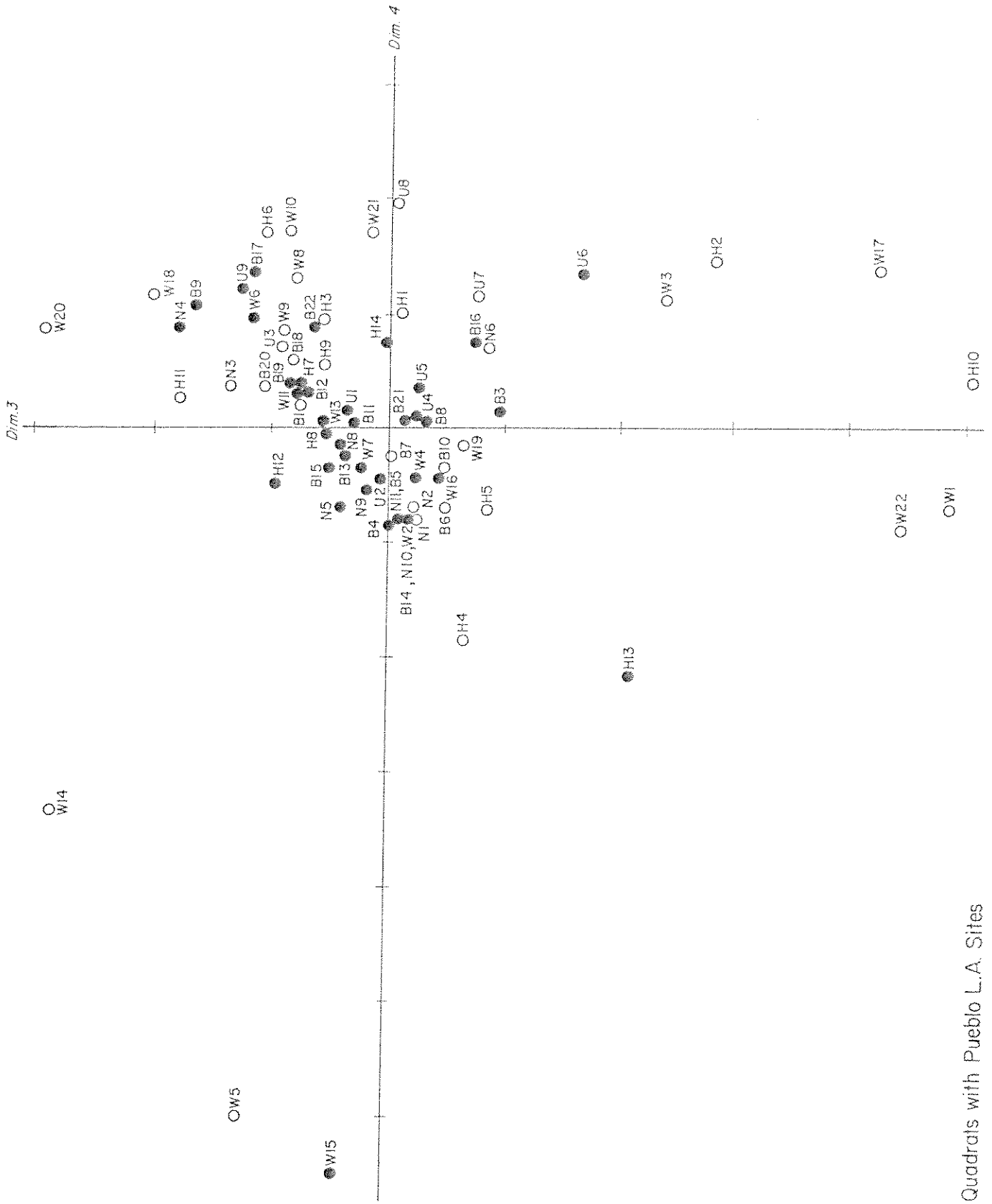
Figure XI-3



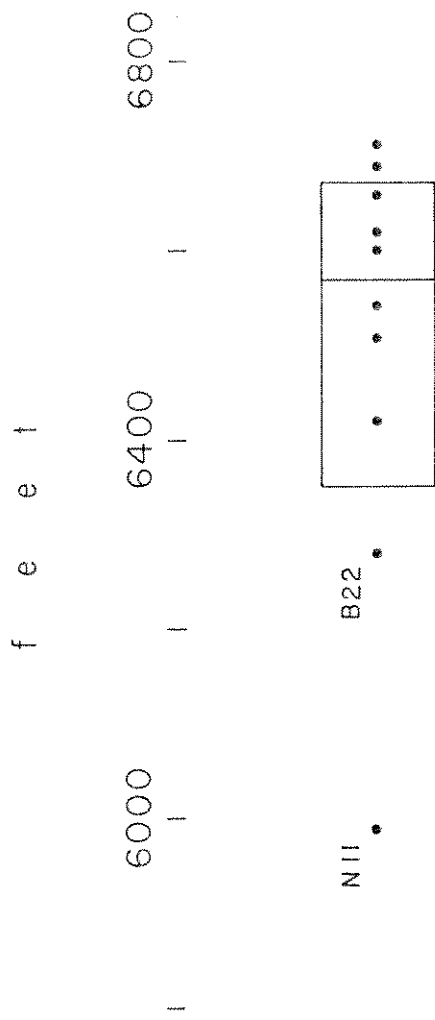


● Quadrats with Pueblo Habitation Sites
 Figure XI-5

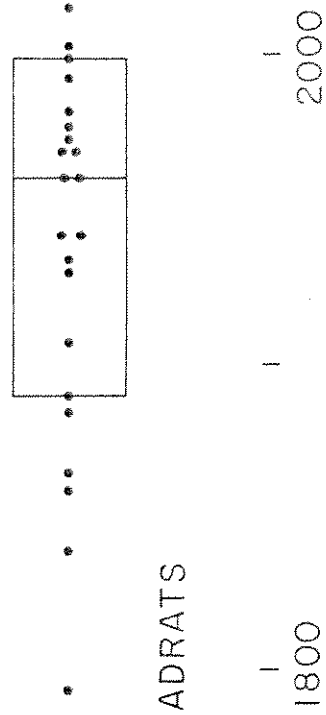




● Quadrats with Pueblo L.A. Sites
 Figure XI-7



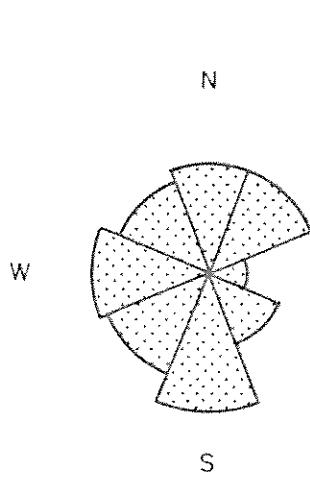
10 HABITATION QUADRATS WITH MOST MATERIAL



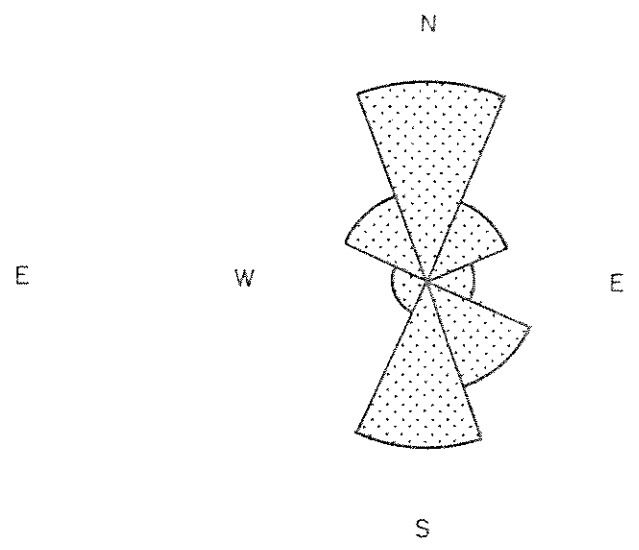
25 REMAINING HABITATION QUADRATS

m e t e r s

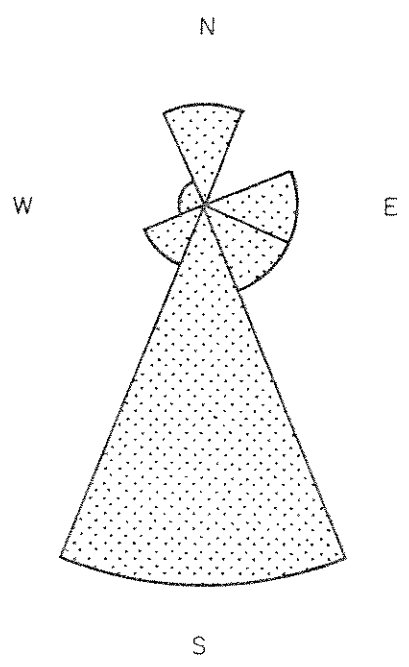
Figure XI-8



random points
n = 78



field stations
n = 46



habitations
n = 32

Figure XI-9

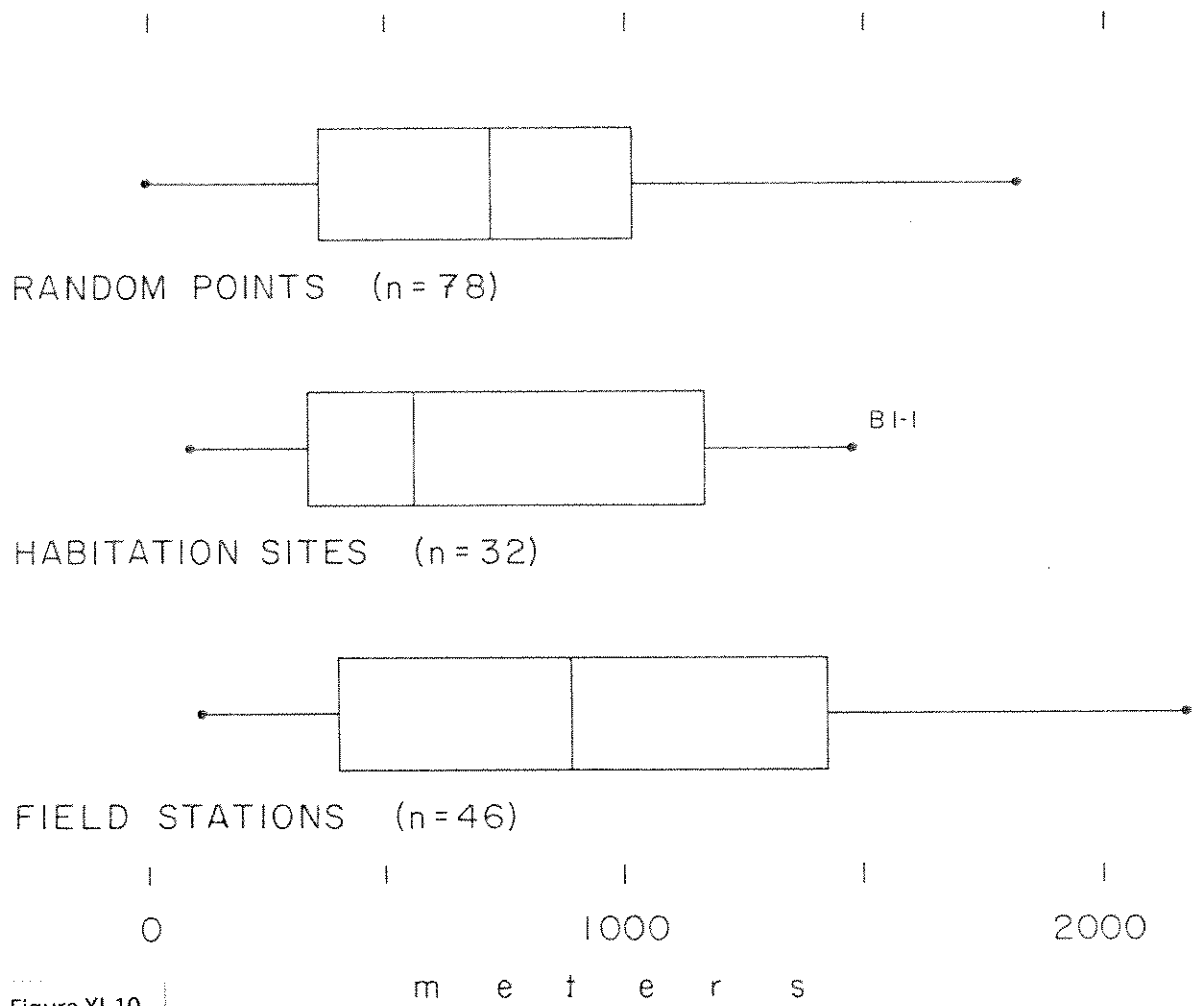


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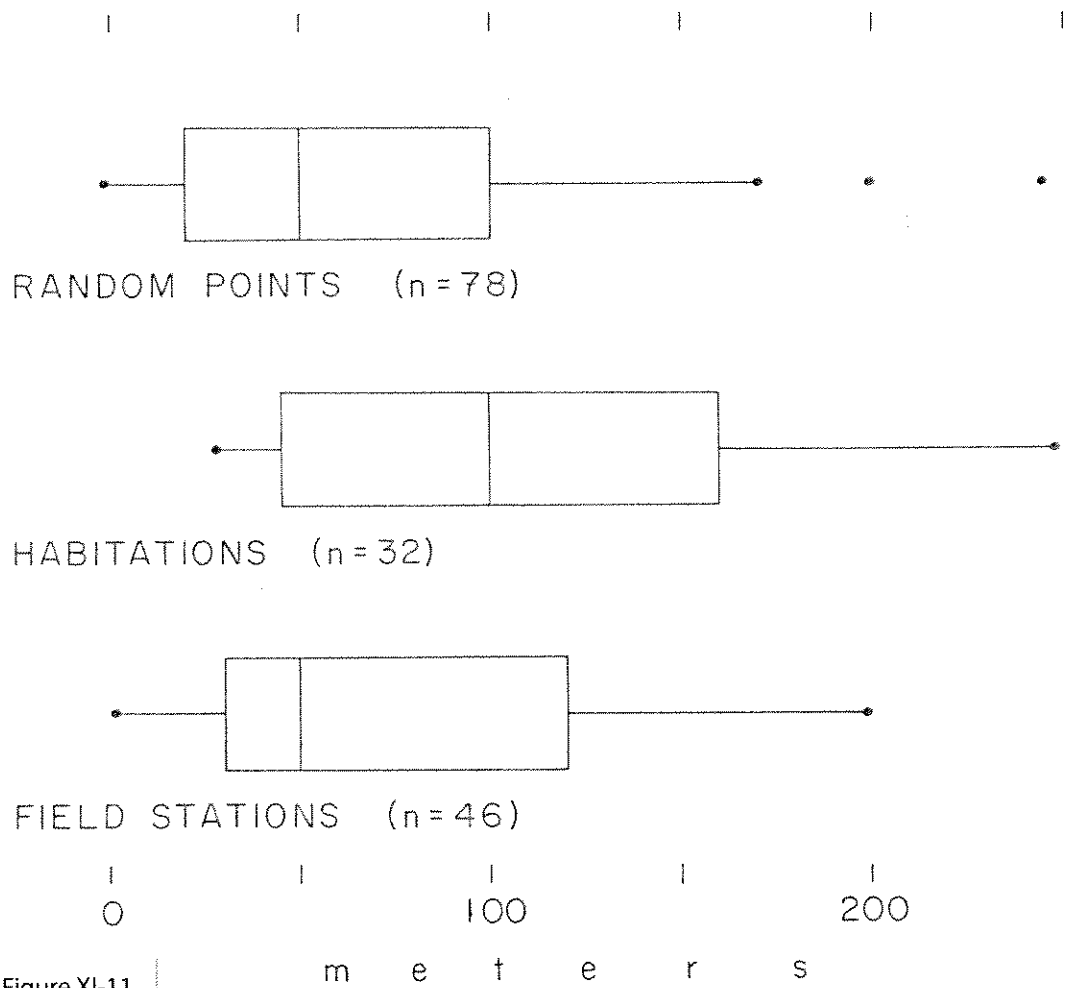


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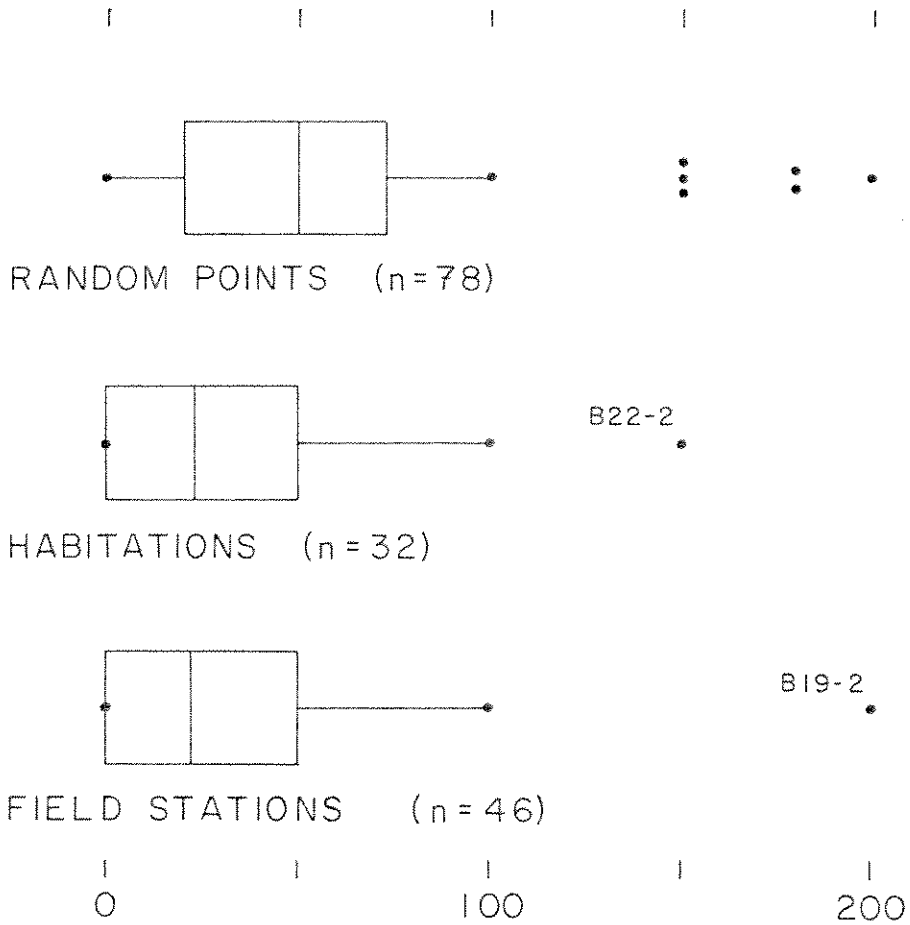


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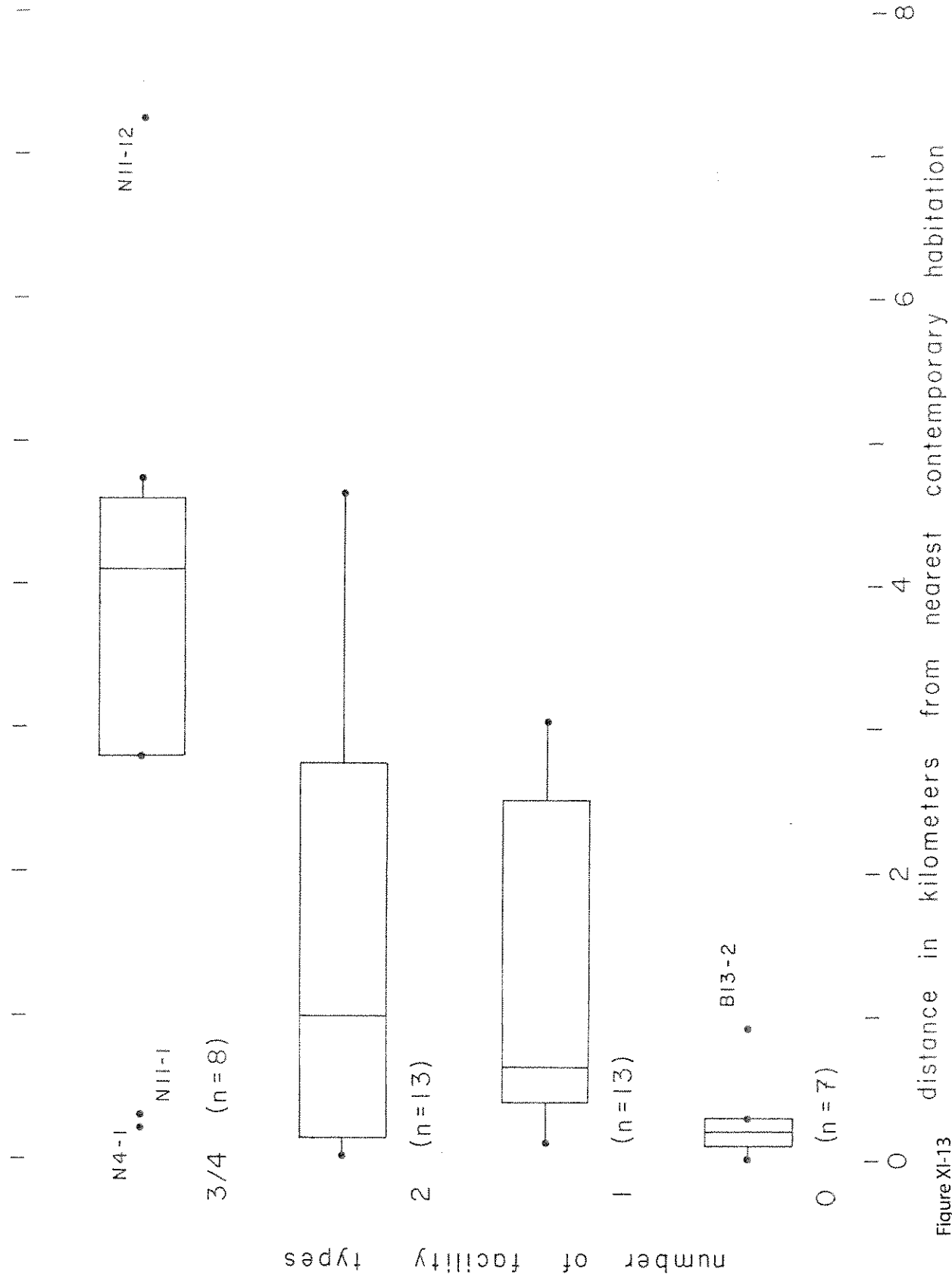


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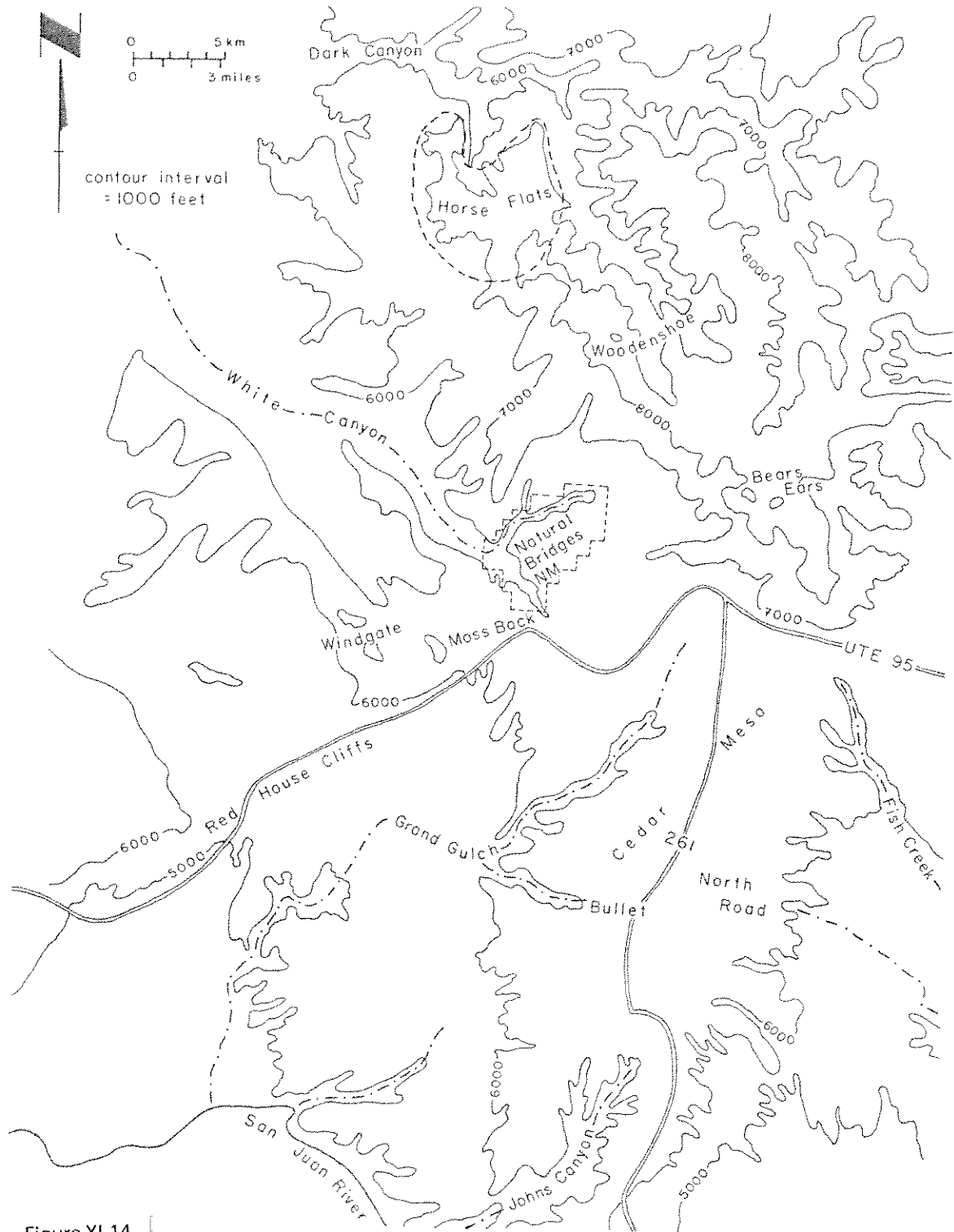


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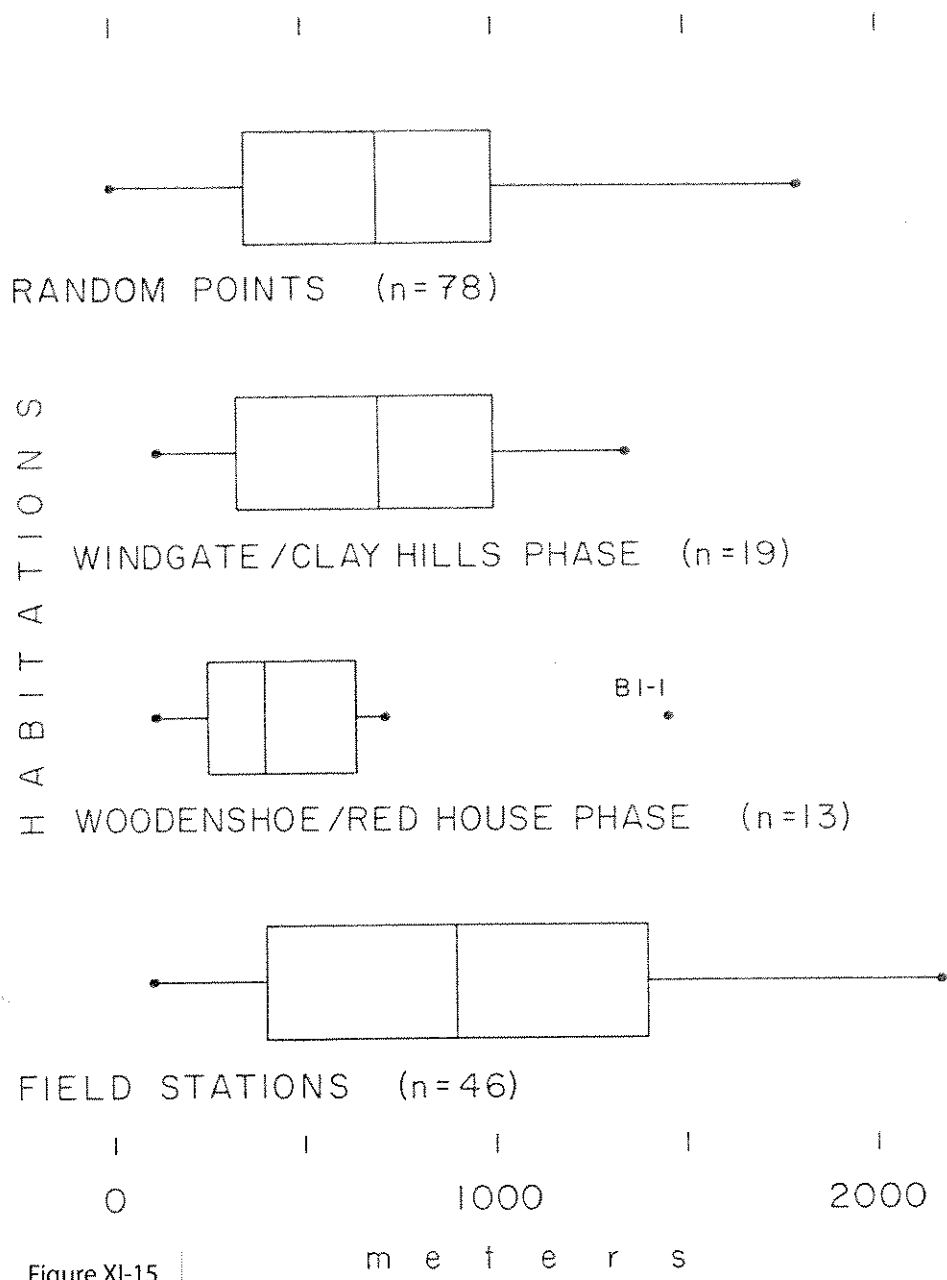
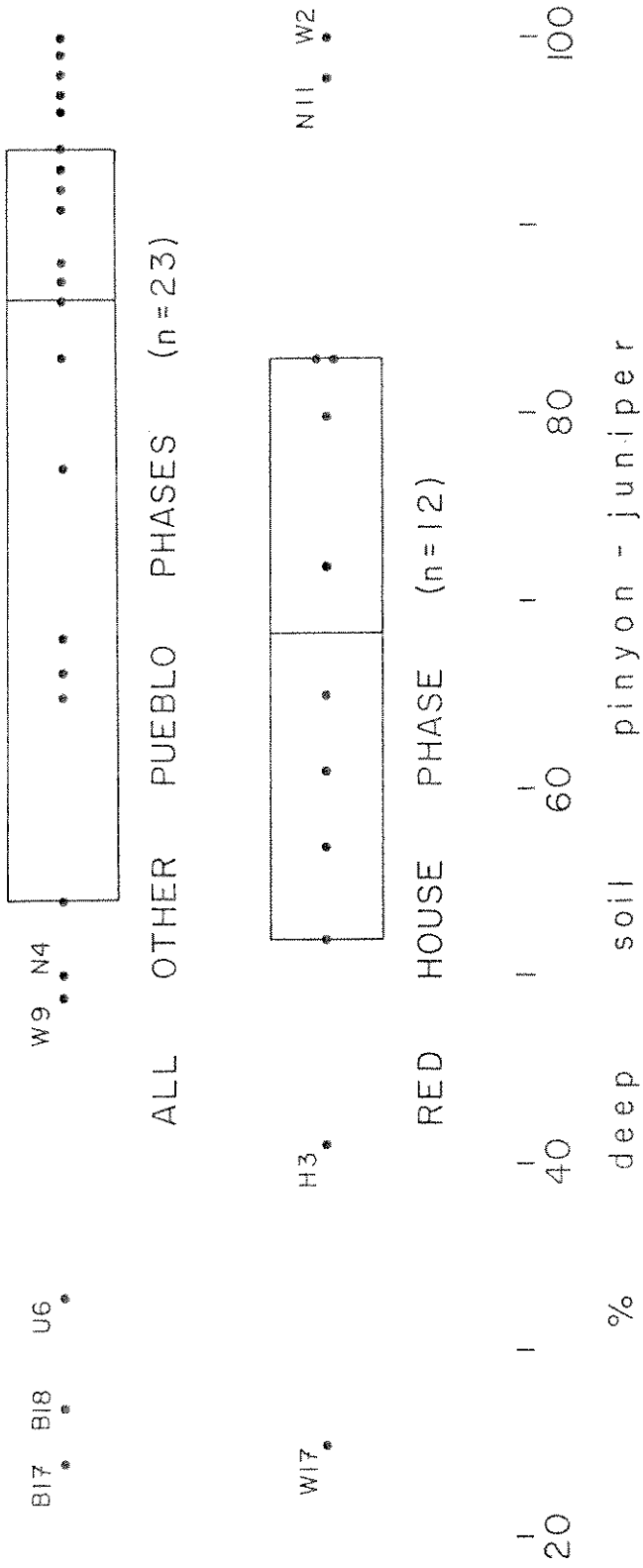


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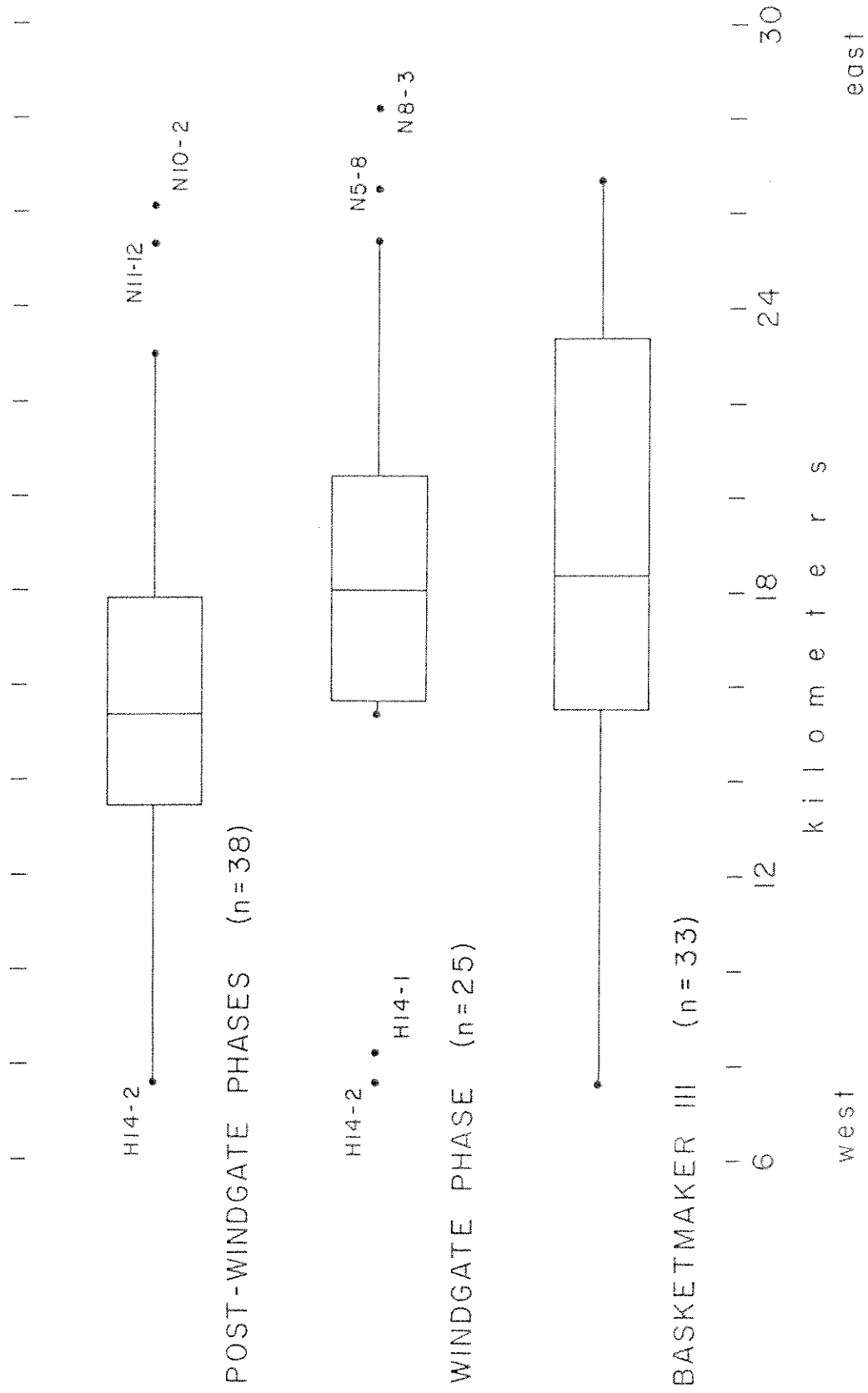


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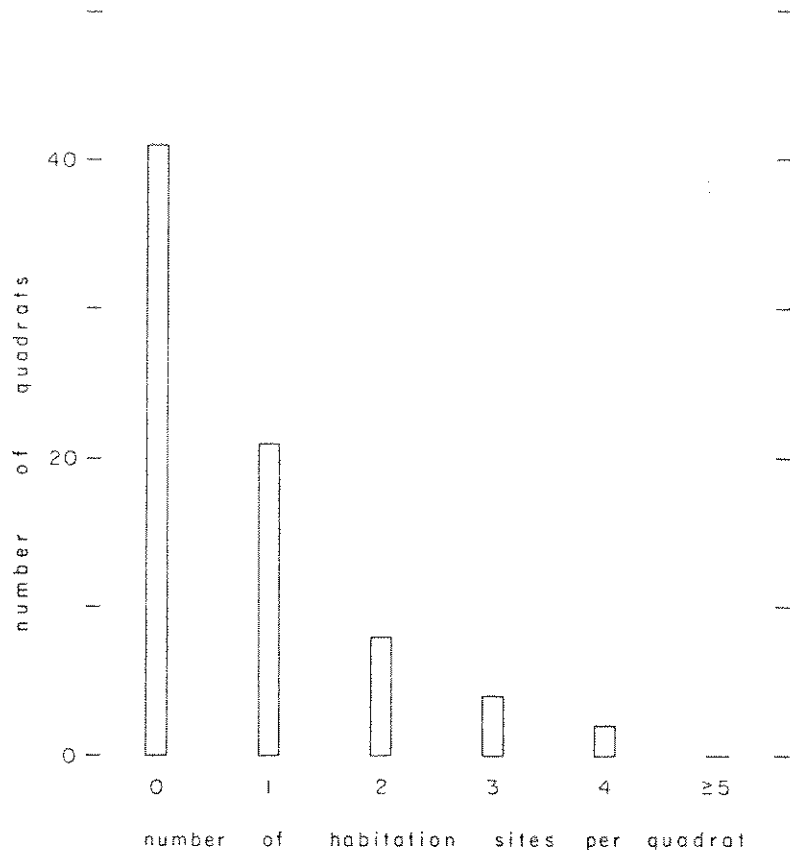


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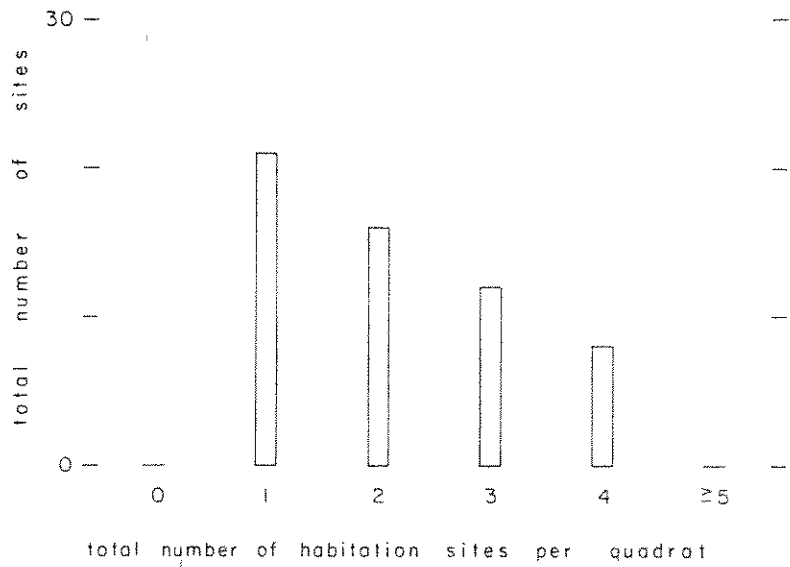
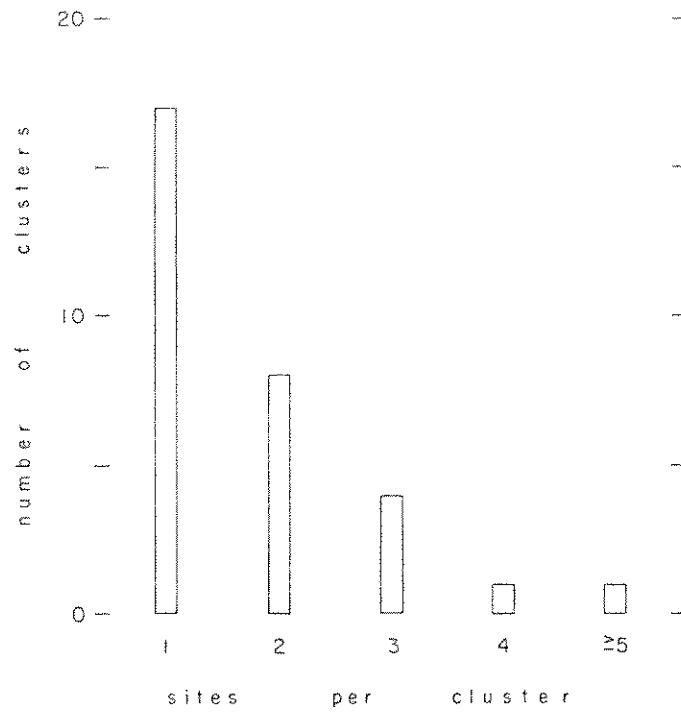
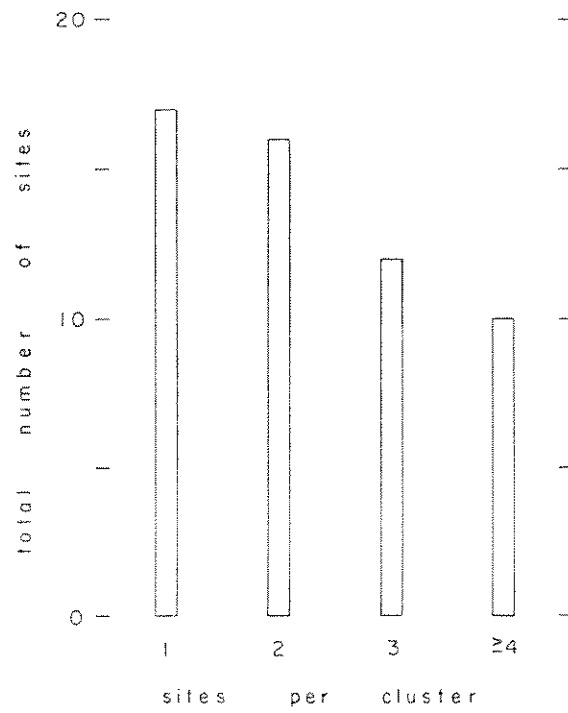


Figure XI-19



a



b

Figure XI-20

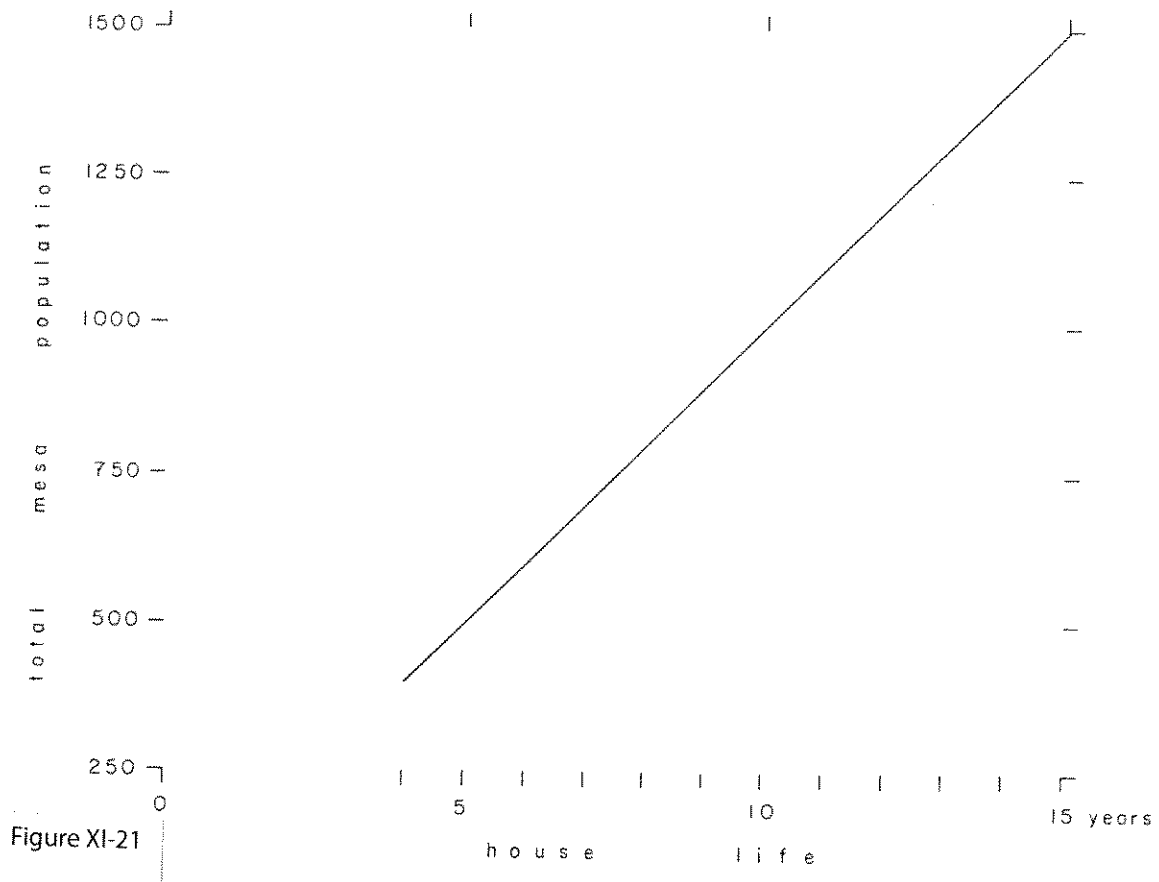


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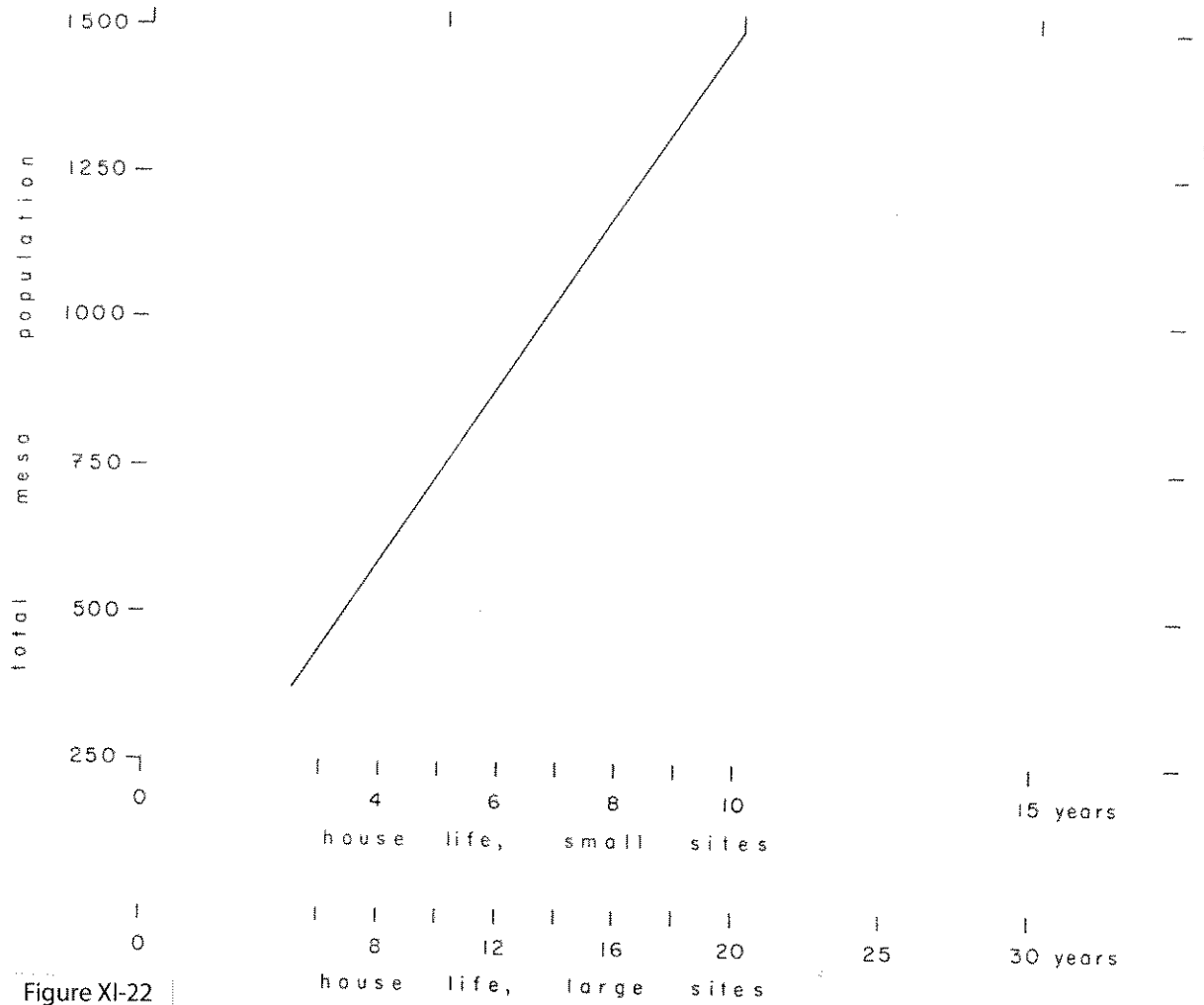


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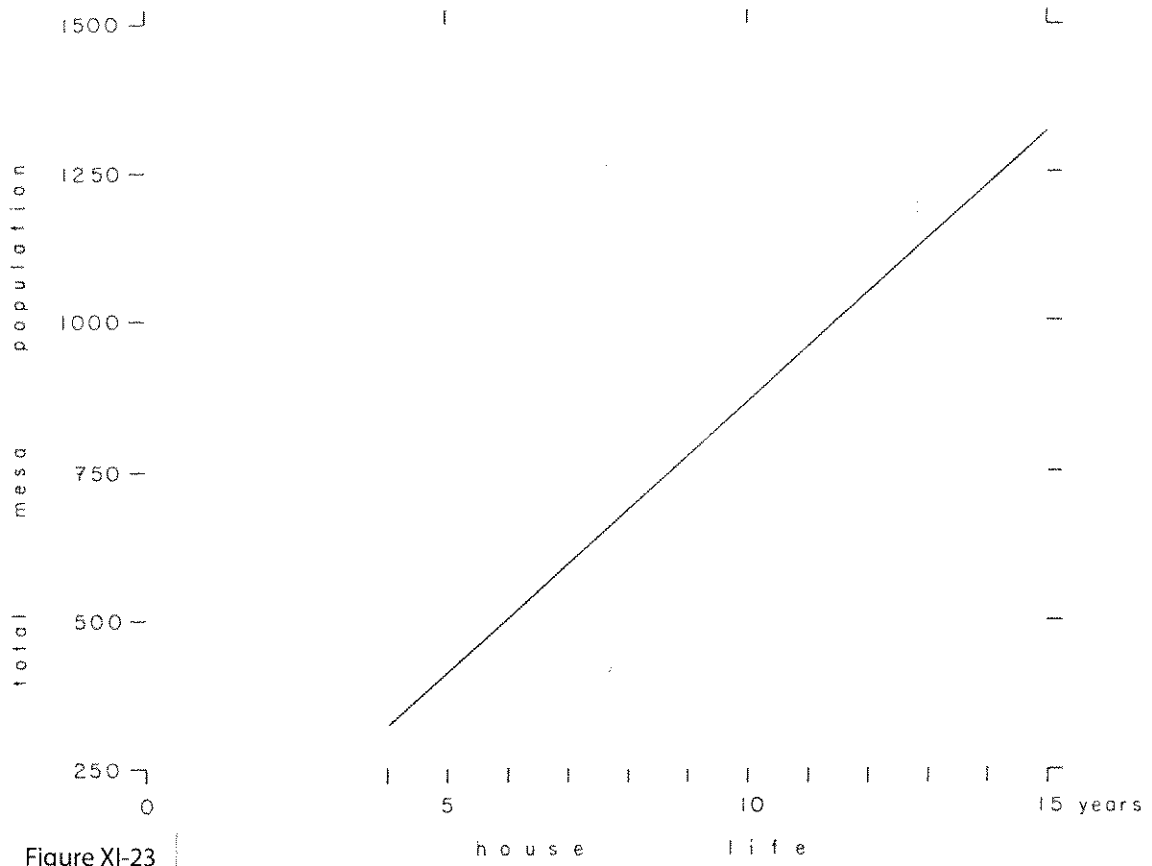


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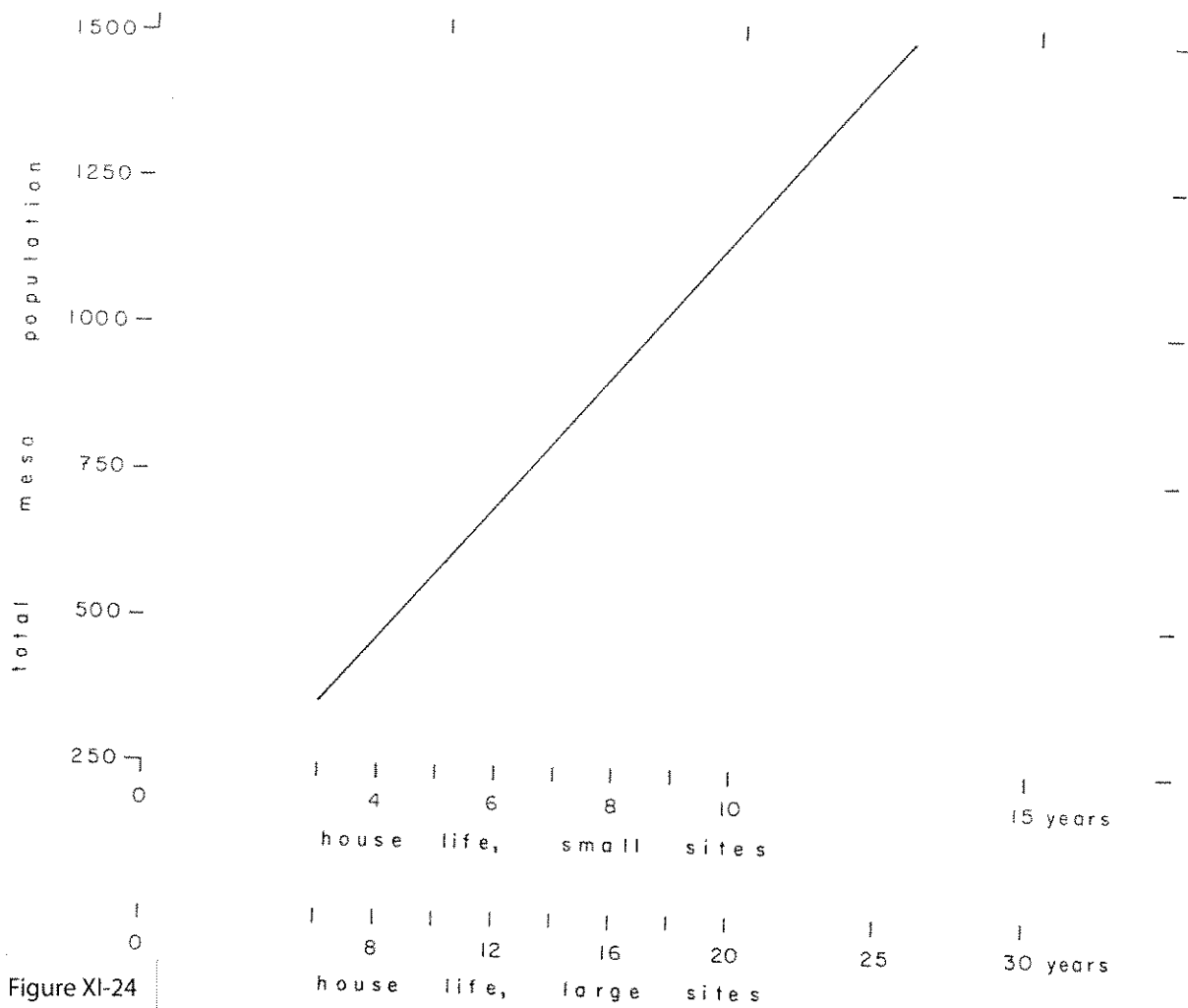


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TABLE XI-1

DISTANCE TO CANYONS, HABITATION SITES

	<u>Grand Gulch</u> (n=32)	<u>Mossbacks</u> (n=23)	<u>Pueblo</u> (n=35)
First Quartile	230	300	290
Median	590	980	660
Third Quartile	1900	2550	2200
Mean	1044	1288	1142

Wilcoxon Tests (Unit Normal Deviate

Grand Gulch vs. Mossbacks	1.135	prob.=.128
Pueblo vs. Grand Gulch	.490	prob.=.312
Pueblo vs. Mossback	.683	prob.=.245

TABLE XI-2
 "SPECIAL PURPOSE L.A.S. PUEBLO SITES"

<u>Quadrat</u>		<u>Site</u>	<u>Elevation</u>	<u>% P.J.</u>	<u>Distance to Rim</u>	
U1	-	1	6775	75	770	
U7	-	2	6560	54	220	
U9	-	2	6800	43	1400	
Lithic	-	3				
	-	5				
	-	6				
	N8	-	3	5740	79	250
	-	2(?)				
N11	-	2	5995	98	700	

Storage	B22	-	4	6280	57	40
	-	-	5			
	-	-	6			
	-	-	7			
	N4	-	3	6540	50	2600
	N8(?)	-	2(?)			

Hunting Campsites	W15	-	1	5280	0	300
	-	-	2			
	H13	-	1	5695	0	220

Sand Dune	H4	-	1	5715	16	1150
	H14	-	1(?)	6040	26	2100
	-	-	2(?)			
n=	<u>12</u>	<u>20</u>				

"FUNCTION"

TABLE XI-3

DISTRIBUTION OF ARCHAEOLOGICAL SITES

Among landforms. Chi-square one sample goodness-of-fit test.

FIELD STATIONS

	Drainage Bottom	Watershed Divides	Sagebrush Flat/Alluv. Terrace	Rocky Breaks	Sandstone Cliffs	
Field Stations	7	32	5	2	0	46
Random Points	6	20	5	9	7	46
Totals	13	52	10	11	7	92

$X^2 = 19.8$ $df = 4$

$P \text{ of } H_0 < .005$ $T_s = .13$

HABITATIONS

	Drainage Bottom/Sage Flat/Alluv. Terrace	Water- Shed Divides	Rocky Breaks/ Sandstone Cliffs	
Habitations	2	22	8	32
Random Points	6	17	9	32
Totals	8	39	17	64

$X^2 = 4.24$ $df = 2$

$P \text{ of } H_0 = .25$ $T_s = .04$

Note:

Some landforms have been combined to achieve adequate sample sizes.

TABLE XI-4

RANK OF WATERSHED DIVIDE NEAREST TO SITES
 Chi-square one-sample goodness-of-fit test.

FIELD STATIONS

	Divide Rank			
	1	2	3+	
Field Stations	24	14	8	46
Random Points	25	14	7	46
Totals	49	28	15	92

$X^2 = 0.18, df = 2$
 P of $H_0 = 7.5$ $T_b = .001$

HABITATIONS

	Divide Rank			
	1	2	3+	
Habitations	12	10	10	32
Random Points	17	10	5	32
Totals	29	20	15	64

$X^2 = 6.47, df = 2$
 P of $H_0 = 0.5$ $T_b = .04$

Note: Third order or greater drainages have been collapsed to achieve adequate cell size.

TABLE XI-5

NUMBER of FEATURES on PUEBLO FIELD STATIONS

in

HARDSCRABBLE, BULLET, and NORTH ROAD DRAINAGES

Features

Sites	Ground Stone	Ash Hearth	Slab Lined Hearth	Slab Lined Cist	Jacal Present	Ash Hearth Only	Slab Lined Hearth Only	Ground Stone (with Hearth)	No Features or Ground Stone
H 14-2A	+	-	+	+	+				
H 14-2C	+	-	+	+	+				
H 8-3	-	+	+	-	+				
N 11-12	+	-	-	+	+				
B 21-10	+	+	+	-	-				
N 4-1	+	+	+	-	-				
H 3-1	+	+	+	-	-				
N 11-1	+	+	-	+	-				
B 3-4	-	-	+	+	-				
(n of sites)						23			
(n of sites)							8		
(n of sites)								18	
(n of sites)									6

Total Sites = 46

* Ground stone is also present on some of these sites.

TABLE XI-6

DISTANCE FROM NEAREST KNOWN CONTEMPORARY
HABITATION SITE BY NUMBER OF FEATURES

Distance

Number of Features	Median	Maximum
0 Features (n = 7)	250 m	940 m
1 Feature (n = 13)	690 m	3.06 km
2 Features (n = 13)	950 m	4.62 km
3 or 4 Features (n = 8)	4.06 km	7.25 km

TABLE XI-7

DRAINAGE TREE RING DATES

<u>Site</u>	<u>Prov.</u>	<u>Inside</u>	<u>Outside</u>	
UGG C10-1	St 3	788	951++VV	Middle Red House in Seriation
UGG C10-1	St 1	765	1130+VV	
	St 6	1057+ -	1217++VV	
		1102 -	1218+B	
		1111 -	1229++B	
		1118 -	1238B	
		1023 -	1238B	
		1182 -	1238B	
		1027+P -	1241B	
		1125 -	1241B	
		1132 -	1241B	
		1197P -	1242B	
		1155 -	1248B	

UGG C10/11-4	Str 2	1042 -	1211++VV	Middle Red House in Seriation
A whole lot of early dates, probably reuse of wood from earlier structure. 8 earlier dates for Str 2, most in 1120-1170 range.				
UGG C14-1	1	1000 -	1136++B	Low Red House in Final Seriation
NR C7-3	4	845P -	1196B	High Red House in Seriation
	3	1034P -	1203VV	
NR C8-2	4	759 -	1203VV	Few ceramics, 3 decorated, 1 MV B/W min pigment
NR C17-2	G	1095P -	1219+B	2 MV B/W organic pigments

TABLE XI-7 CONTINUED

<u>Site</u>	<u>Prov.</u>	<u>Inside</u>	<u>Outside</u>		
	G	1083	-	1259B	
	H	1141	-	1225+B	
	H	1129P	-	1226+V	
	H	1128P	-	1228V	
	J	1177	-	1232VV	
	J	1078	-	1245+VV	
	J	1173	-	1247VV	
	E	1102	-	11172VV	Woodenshoe in discriminant analysis
	E	1034	-	1255+VV	
	C	976+P	-	1060VV	
	C (EXT)	1079	-	1251+VV	Reliable date?
	C (EXT)	1127	-	1274VV	
	C (EXT)	1288	-	1379VV)	Not reliable dates
	C (EXT)	1288	-	1379VV)	

NR C23-2	5	1039	-	1217++R	Few ceramics, only five decorated,,
	5	1134	-	1229++VV	
	5	1069	-	1252V	All Mesa Verde B/W, organic pigment

TABLE XI-8

DRAINAGE QUADRATS

PUEBLO HABITATION SITES

	UGG	BULL	NR	WJ & HS
# Red House Habitations	0	9	1	4
# All Other Habitations	5	17	7	11
	5	26	8	15

	UGG	BULL	NR	WJ & HS
# Red House and Woodenshoe Habitation	0	15	2	7
# All Other Habitations	5	11	6	8
	5	26	8	15

TABLE XI-9

A) DISTRIBUTION OF PUEBLO HABITATION SITES

	<u>Number of Quadrats</u>	<u>Number of Habitation Sites Per Quadrat</u>
	41	0
	21	1
	8	2
	4	3
	2	4

TOTAL	76	

B) NUMBER OF HABITATIONS

<u>Sites Per Quadrat (Class)</u>	<u>Sites Per Class</u>
0	0
1	21
2	16
3	12
4	8

TOTAL	57

TABLE XI-10

A) "CLUSTERS" OF HABITATION SITES

<u>Number of Sites Per Cluster</u>	<u>Number of Clusters</u>
1	17
2	8
3	4
4	1
≥ 5	1

B) TOTAL NUMBER OF SITES PER CLUSTER

<u>Cluster Size</u>	<u>Total Number of Sites</u>
1	17
2	16
3	12
≥ 4	10

TABLE XI-11

PUEBLO HABITATION QUADRATS

COMPARED WITH POISSON DISTRIBUTION

<u>Class</u>	<u>Expected</u>	<u>Observed</u>
0	35.90	41
1	26.92	21
2	10.10	8
3	2.524	4
≥ 4	.556	2

Lambda .750

Variance 1.0296

Chi square = 5.23

D.F. = 2 Approx. probability = .07

TABLE XI-12

PUEBLO HABITATION QUADRATS COMPARED
WITH NEGATIVE BINOMIAL DISTRIBUTION

k BY MOMENTS 1.9176

<u>Class</u>	<u>Expected</u>	<u>Observed</u>
0	40.355	41
1	21.757	21
2	8.924	8
3	3.276	4
≥ 4	1.688	2

Chi square = .349

D. F. = 1 Approx. Probability \approx .60