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RESULTS OF ANALYSES OF FUR SAMPLES FROM THE SAN JOAQUIN KIT FOX AND ASSOCIATED SOIL AND WATER SAMPLES FROM THE NAVAL PETROLEUM RESERVE NO. 1, TUPMAN, CALIFORNIA

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ABSTRACT

The purpose of this study was to determine whether analysis of the elemental content of fur from San Joaquin kit foxes (*Vulpes macrotis mutica*) and of water and soil from kit fox habitats could be used to make inferences concerning the cause of an observed decline in the kit fox population on Naval Petroleum Reserve No. 1 (NPR-1). Fur samples that had been collected previously from NPR-1, another oil field (NPR-2), and two sites with no oil development (Camp Roberts and Elkhorn Plain) were subjected to neutron activation analysis. In addition, soil samples were collected from the home ranges of individual foxes on NPR-1 and Camp Roberts and from undisturbed portions of major soil types on NPR-1 and subjected to neutron activation analysis. Finally, wastewater samples were collected from tanks and sumps on NPR-1 and analyzed.

Statistical analyses revealed that most of the variance in elemental content of fur was attributable to differences among sites. Most elemental concentrations in fur were highest at Camp Roberts and lowest on the undeveloped portions of NPR-1. Fur concentrations were intermediate on the developed oil fields but were correlated with percent disturbance and with number of wells on NPR-1 and NPR-2. The fact that most elements covaried across the range of sites suggests that some pervasive source such as soil was responsible. However, fur concentrations were not correlated with soil concentrations. This suggests that differences in bioavailability or in soil intake were responsible for the variance in that set of elements.

Some elements that are associated with oil development do not fit this pattern. Arsenic, which was used as a biocide, is found at higher concentrations on NPR-1 and NPR-2 than other sites and, in three fur samples from those sites, at concentrations equal to hair concentrations associated with toxic effects in humans. However, the highest concentration is from a fox that lived on the periphery of NPR-1 outside the developed areas. Barium, which is a major component of drilling fluids, was also higher in fur samples from the oil fields than from other sites and was significantly correlated with the number of wells in the foxes' home range. However, the differences among sites were small and, except for comparisons of undeveloped NPR-1 with other sites, were not statistically significant. Vanadium, which is associated with petroleum, occurred at higher average concentrations in fur from oil fields than any site except Elkhorn Plain, all of the top ten concentrations were from NPR-1, and concentrations were correlated with the number of wells. Although the differences among sites in vanadium concentrations were relatively small, the range across individuals was relatively large, which is consistent with exposure of a few

foxes to localized sources. Chromium was a chemical of concern because of the past use of chromates in drilling fluids. However, chromium concentrations were not high on the oil fields either on average or in individuals. Another concern was that foxes were drinking produced water from sumps, which is primarily a sodium chloride solution. However, none of the highest sodium concentrations were from oil fields, and the highest median concentrations were from the Elkhorn Plain and Camp Roberts.

In conclusion, the kit foxes on the developed portion of NPR-1 did not have concentrations of elements in fur relative to other sites that would account for the population decline in the early 1980s. The oil-related elements As, Ba, and V were elevated in fox fur from oil fields, but only As was sufficiently elevated to suggest a risk of toxicity in individual foxes. However, arsenic concentrations suggestive of sublethal toxicity were found in only 0.56% of foxes from developed oil fields, too few to account for a population decline.

1. INTRODUCTION

The San Joaquin kit fox (*Vulpes macrotis mutica*) population on the Naval Petroleum Reserve No. 1 (NPR-1) was observed to sharply decline during the early 1980s. Because the population had not been monitored prior to 1980, the significance of this decline and the current population level cannot be interpreted in a historical context. It is quite possible that the observed population dynamics were normal, given the inherent quality of NPR-1 as kit fox habitat and stochastic factors, particularly the climatic variability during the late 1970s and the 1980s. However, the level of oil drilling and production increased in the late 1970s and early 1980s, so the possibility that toxic chemicals associated with this development caused or contributed to this decline must be considered.

The scope of this study was determined by the findings of a previous report (Suter 1988) which reviewed the use of chemicals on NPR-1, the chemical composition of the produced oil and water, the toxicity and bioaccumulation of those chemicals, their concentrations in soil and water on NPR-1, and evidence of toxic effects on wildlife and livestock at other oil fields. This review indicated that most of the chemicals of concern (those chemicals that were found to occur on the site in media and concentrations that could lead to hazardous exposures) were metals (e.g., Cr and Ba) or metaloids (As). Also, the oil-related materials on the site that are potentially hazardous (e.g., produced water and drilling fluids) can be characterized by concentrations of particular elements that are much higher than concentrations in naturally occurring materials. Therefore, it was decided that kit fox tissues should be analyzed for their elemental composition as an indication of the degree of exposure of foxes to oil field materials. The only tissue that was available from a large number of kit foxes was fur. This report presents the results of the analyses of fox fur and some supporting analyses of soils and waters.

1.1 CONCEPTUAL APPROACH

Because nothing is known about the elemental composition of kit fox fur as an indicator of toxicity, it is not possible to say that effects have or have not occurred by a simple examination of the concentrations. Rather, indirect lines of inference must be used.

The following arguments depend on the assumption that the variance in concentration of elements in fur is due primarily to differences in exposure of the foxes to those elements in the environment. That assumption is supported by numerous laboratory and field studies relating fur concentrations to exposure levels (Chatt and Katz 1988, Huckabee et al. 1972, Jenkins 1979). If analytical techniques, replication, and specification of exposure are sufficient, the assumption

holds. However, the relationships between exposure levels and fur concentrations are stronger for non-nutrient elements such as Pb and Hg than for nutrient elements such as Na and Cu.

1. Areas occupied by foxes on NPR-1 vary considerably in the degree of development. If oil development results in increased exposure to certain elements, the elemental composition of fur should be related to the exposure of foxes to development activities. Hence, the elemental concentration of fur from home ranges on NPR-1 that had minimal development have been compared with those that had significant development, and elemental concentrations have been correlated with indices of the degree of development.

Patterns in both mean concentrations and extreme concentrations are examined. If exposure is due primarily to pervasive contamination of oil fields, differences in mean fur concentration would be observed. If exposure is due primarily to exposure to a limited number of highly contaminated locations, patterns of extreme fur concentrations would be observed.

In all cases, in addition to an examination of the statistical significance of differences between groups, the actual magnitudes of the differences are examined. Statistical differences between groups for a particular element may be due to low variances within groups rather than large differences between groups, and the highest concentrations may not actually differ greatly from the median concentration.

2. Because developed and undeveloped portions of NPR-1 differ in characteristics other than degree of oil development activity, it is not possible to conclude that differences in fur composition between those areas are due to oil development. Therefore, kit fox fur from reference sites was analyzed. These sites included one oil field (NPR-2) and two areas that have no oil development (Camp Roberts and Elkhorn Plain). If oil development is responsible for higher concentrations in fur from developed rather than undeveloped NPR-1, concentrations should be relatively high in fur from developed NPR-2 and low in fur from Camp Roberts and Elkhorn Plain.

3. If differences in exposure to oil-related chemicals was responsible for the decline in the NPR-1 kit fox population, the exposures (either maximum or median) should be higher on developed parts of NPR-1 than on NPR-2. Also, the exposures should be higher on all portions of NPR-1 than on Camp Roberts or the Elkhorn Plain, because even the undeveloped portions of NPR-1 have some exposure to oil development and experienced some decline in fox populations in the early 1980s.

4. If exposure to oil-related chemicals and materials has occurred, then elements that are known to be associated with oil development should be among those that are elevated in fur from developed parts of oil fields.

5. If the exposures that result in elevated fur concentrations are due to a few relatively isolated sources on oil fields, then foxes with elevated fur levels should be spatially clustered.

6. If high concentrations of particular elements in fur reflect toxic exposures, then the foxes with high levels should have low survivorship or poor reproductive success following sampling.

7. If elemental concentrations in kit fox fur from oil fields are high relative to wildlife fur concentrations reported in the literature for pristine areas, and are similar to fur concentrations from contaminated areas or animals experimentally dosed with metals, that would support the hypothesis that the elevated concentrations are not due to natural variability. The comparisons required by this and the following argument are approximate because of differences among mammalian species in diet and physiology.

8. If observed fox fur concentrations are as high as those that have been associated with toxic effects in other species, that would support the hypothesis that toxic effects have occurred in the foxes.

Note that individually none of these inferences provide powerful evidence concerning the cause of the kit fox decline. This situation is typical of epidemiological studies because attempts to infer causation in uncontrolled exposures of populations that are not randomly assigned to treatments are never conclusive. Like any other epidemiologically based study, the conclusions must be based on the weight of evidence. That is, the conclusions of this study are based on the strength of evidence provided by all of the lines of evidence considered in aggregate.

2. METHODS

2.1 STUDY SITES

Four sites, NPR-1, NPR-2, Elkhorn Plain, and Camp Roberts were studied. NPR-1 and NPR-2 are in Kern County, California. Elkhorn Plain is in San Luis Obispo County, California. Camp Roberts is in San Luis Obispo and Monterey counties, California.

NPR-1 and NPR-2 are characterized by dissected low elevation hills (<500 m) and adjacent flat valley areas. Summers are hot and dry; winters are cool and damp. Mean daily maximum temperatures at Bakersfield, the nearest official meteorological station, range from 13.7°C (56.6°F) in December to 36.9°C (98.5°F) in July. Most rainfall (~11–15 cm annual precipitation) occurs in the winter months. NPR-1 and NPR-2 are Lower Sonoran grassland (Twisselman 1967). Desert saltbush (*Atriplex polycarpa*) is the dominant shrub and ground cover is

predominantly red brome (*Bromus rubens*) and red-stemmed filaree (*Erodium cicutarium*). NPR-1 is an active oil, field and NPR-2 is a mostly depleted oil field.

Camp Roberts consists mostly of gently rolling low elevation (<600 m) hills. Mean daily maximum temperatures range from 14°C (58°F) in December to 34°C (94°F) in July. Annual rainfall (~36 cm) occurs mostly between November and April. Vegetation on Camp Roberts includes grassland, oak woodland, chaparral, and mixed evergreen habitats. Camp Roberts is a training ground for the National Guard and the U.S. Army.

Elkhorn Plain is a gently sloping valley with an average elevation of ~700 m. Like the other sites, summers are hot and dry, and winters are cool and relatively moist. Annual precipitation is typically 15–23 cm (D. Germano, personal communication). Common shrubs include mormon tea (*Ephedra californicus*), buckwheat (*Eriogonum fasiculatum*), and snakeweed (*Gutierrezia bracteata*). Red brome, red-stemmed filaree, and Arabian grass (*Schismus arabicus*) are the predominant herbaceous cover. The land is primarily used for livestock grazing.

2.2 CLASSIFICATION OF DISTURBANCE/DEVELOPMENT ON NPR-1 AND NPR-2

Disturbance (well pads, sumps, pipelines, pipe storage yards, buildings) was estimated by the placement of dot grids over aerial photographs of the study area (Bryant 1943; Mosby 1980). Raw disturbance is reported as the percentage of the dots intercepting disturbances. Average disturbances were also calculated. Each average disturbance is the mean of the raw disturbance for a quarter-section (i.e., a quarter-square-mile area) and the adjacent eight quarter-sections. If data were not available for all eight adjacent quarter-sections, the average disturbance is based on the mean for quarter-sections for which data were available.

2.3 FUR SAMPLE COLLECTION AND PROCESSING

The fox fur samples were collected by clipping a patch of fur from foxes in preparation for withdrawing blood samples for another project. Samples were collected in 1981, 1982, and 1990 from NPR-1; in 1990 from NPR-2; in 1990 from Camp Roberts; and in 1981 from Elkhorn Plain. A few fur samples from undeveloped locations in Buena Vista Valley were classified as undeveloped NPR-1 samples, even though they were located outside the civil boundaries of NPR-1. One of these samples was within the civil boundaries of NPR-2.

The fur samples were not obtained by a statistically designed sample of foxes. Although the foxes were collected in a way that is not believed to bias the samples, the foxes are neither a random sample nor a probability sample of the foxes on the sites. Therefore, it is possible but unlikely that some unknown factor biased the samples. The following discussions are based on the assumption that unknown and significant biases in the sampling did not occur.

Fur samples were shook for 20 min in 50% acetone, then for 20 min in water, rinsed in a Buchner funnel with a liter of water, dried at 200°C, and packed in plastic irradiation vials. All water was distilled and deionized. This process removed external contamination so that reported concentrations are for assimilated elements.

2.4 WATER SAMPLE COLLECTION

Water samples were taken from three production water sumps and four production water tanks. Samples from sumps were obtained by immersing a bottle near the edge of the sump and well above the bottom so as to avoid suspending sediment and were acidified in the field. Samples of production water were taken from a tank and a sump at 10G, 18G, and 24Z and from a tank at 25S. Field blanks were taken by filling a bottle with deionized water at each sampling site. Water samples were shaken to resuspend any settled solids before subsamples were taken for analysis. This was done to include in the analyte any material that was suspended at the time of collection and therefore would have been consumed by any animal drinking the water.

2.5 SOIL SAMPLE COLLECTION

Soil samples were obtained to (1) examine the range of variation in major soil types occurring on NPR-1 and (2) determine if soil and fur chemistry were correlated. Surface soil samples were collected with soil augers. Approximately the top 15 cm of soil was collected. All soil samples were sieved through 1 mm nonmetallic mesh, and the fine fraction was ground to powder for irradiation.

2.5.1 Soil Types

Sampling of soil types on NPR-1 was restricted to four of the major soil types: Elk Hills sandy loam, Kimberlina sandy loam, Torriorthents thick, and Torriorthents very thin. Samples were collected from randomly selected quarter-sections. For each soil type, three samples were collected from developed sites (>20% raw disturbance of the quarter-section and >15% raw disturbance of the section) and three samples were collected from undeveloped sites (<10% raw disturbance of the quarter-section and <15% raw disturbance of the section).

The following procedure was used to sample soil types: The sampling crew approached as close as possible by road to a corner of the quarter-section. From this point a random compass direction that the soils maps indicated passed through the desired soil type was selected. The compass bearing was followed until the probable soil type was encountered, and a soil core was taken. If the soil core confirmed that the soil was the desired type, a sample was collected. If the soil core was not the desired type, the crew continued on that bearing until they found the soil

type or reached the quarter-section boundary. If they reached the quarter-section boundary, the crew searched opportunistically within the quarter-section until the soil type was located. When the desired soil type could not be found in the original quarter-section, another randomly selected quarter-section was selected and searched in the same manner.

Additional samples were collected from two washes within the Kimberlina Cajon riverwash soil type (six sites in each wash plus two duplicates). One wash may have been impacted by effluent release. The other wash is an undeveloped area and unlikely to have been impacted by effluent or other potential toxicants.

2.5.2 Soil Samples for Correlation with Fur Chemistry

The second set of soil samples was collected from the "home ranges" of 24 kit foxes on NPR-1 and of 10 on Camp Roberts. The data from these samples were used to examine the correlation of soil composition (i.e., chemistry) with composition of fox fur. Locations of foxes that had been trapped or that had been located during radiotelemetry studies were plotted. The "centroid" of these locations was determined by visual inspection. For many foxes this centroid was derived from only one or two known locations. Soil samples were not taken from the home ranges of foxes whose locations were very widely dispersed. Twenty randomly selected samples were collected from NPR-1. Four additional samples were collected, so that at least 10 samples each were obtained for developed (>15% raw disturbance of the section) and undeveloped (<15% raw disturbance of the section) areas. Ten samples were also collected from Camp Roberts.

Soil samples were consolidated from five samples taken within the "home range" of each fox. From the center of a fox's home range, the authors walked ~100 m (estimated by pacing) in a random compass direction and collected a soil sample. Four additional soil samples were obtained for each fox. These were collected ~400 m north, east, south, and west of the center sample. The 400 m distance was chosen because it equals one-third of the radius of a circle with the same area as the average home range of a kit fox on NPR-1. This sampling approach was used because home range data do not exist for most of the kit foxes. For each approximated home range, all five samples were placed in a plastic bucket and mixed. A subsample of this composite sample was analyzed.

2.6 CHEMICAL ANALYSES

Elemental analyses were performed by neutron activation analysis (NAA). This method was selected on the basis of two considerations. First, the fur samples were small, ~0.1 g. Second, a review of potentially hazardous chemicals on NPR-1 revealed several elements that might be toxic or might be indicative of toxic materials (Suter 1988). Therefore, it was necessary to choose

a method that would provide sensitive analysis of multiple elements in a small sample. NAA fulfilled this requirement by detecting 49 elements in the fur samples. Metals missed by NAA were determined in aliquots of the soil samples by ICP and AA. National Bureau of Standards standard reference materials were analyzed with each set of samples, and those results were checked to confirm the validity of the analyses.

3. RESULTS

3.1 DATA SUMMARY

Fur samples from 93 adult foxes were analyzed. They included 43 females and 50 males. They came from NPR-1 (49), NPR-2 (12), Camp Roberts (20), and the Elkhorn Plain (6). Because of large home ranges, six foxes were not associated with a particular site. In addition, fur from nine pups and six subadults was analyzed. Except for one gray fox (*Urocyon cinereoargenteus*), all were San Joaquin kit foxes.

Because concentrations of some elements in some samples were below detection limits for NAA, the data were left-censored, and the distributions of concentrations for those elements could not be determined directly. However, if the distribution functions of the concentrations can be specified, the maximum likelihood estimates of the distributions can be determined. For both fur and soil, the distributions of all noncensored elements were adequately described by the log normal distribution. Hence the SAS LIFEREG procedure (SAS Institute 1988), assuming lognormality, was used to estimate the necessary parameters for those elements that had some censoring. This procedure was limited to those elements with less than half of the observations censored. For uncensored elements, the conventional unbiased estimators were used. Concentrations of elements with >50% censoring were not included in statistical analyses, but are listed in Table 1.

Because the concentrations of fur and soil are log-normally distributed and because we are interested in the characteristics of "typical" foxes, the measure of central tendency presented and discussed in this report is the median (Table 1). For this distribution the median is estimated by the antilog of the mean of the log values and represents a concentration that is equally likely to be exceeded or not exceeded by an individual observation (Johnson and Kotz 1970).

The phrases *statistically significant* or *statistically different* indicate a probability of <0.05 that the differences discussed are due to chance.

Table 1. Median concentrations in fur and 95% confidence limits for elements detected in more than half of fur samples from developed NPR-1, developed NPR-2, undeveloped NPR-1, and the undeveloped reference sites Camp Roberts (CR) and Elkhorn Plain (Elk).

Element	Site	Total Obs.	Censored Obs.	Lower 95% CL	Median	Upper 95% CL
AG	U (NPR1)	25	23	0.007	0.033	0.159
	U-CR	20	19	0.000	0.003	4.441
AL	D (NPR1)	24	0	419.686	537.345	687.988
	D (NPR2)	12	0	283.434	406.453	582.866
	U (NPR1)	25	0	184.834	253.612	347.983
	U-CR	20	0	1095.690	1388.418	1759.352
	U-ELK	6	0	786.128	979.55	1220.57
AS	D (NPR1)	24	0	0.333	0.430	0.555
	D (NPR2)	12	0	0.415	0.737	1.308
	U (NPR1)	25	0	0.135	0.171	0.217
	U-CR	20	1	0.117	0.180	0.276
	U-ELK	6	0	0.227	0.250	0.275
AU	D (NPR1)	24	0	0.0018	0.0021	0.0026
	D (NPR2)	12	0	0.0027	0.0039	0.0056
	U (NPR1)	25	0	0.0017	0.0026	0.0039
	U-CR	20	0	0.0114	0.0155	0.0215
	U-ELK	6	0	0.0030	0.0043	0.0063
BA	D (NPR1)	24	4	8.940	12.585	17.716
	D (NPR2)	12	4	4.508	7.448	12.304
	U (NPR1)	25	13	1.724	3.243	6.098
	U-CR	20	3	8.122	10.687	14.062
	U-ELK	6	0	8.119	10.491	13.556
BR	D (NPR1)	24	0	13.436	17.205	22.030
	D (NPR2)	12	0	11.737	13.972	16.633
	U (NPR1)	25	0	11.987	13.564	15.349
	U-CR	20	0	6.317	8.860	12.426
	U-ELK	6	0	17.783	20.921	24.612
CA	D (NPR1)	24	15	80.007	148.533	275.752
	D (NPR2)	12	11	0.733	33.381	1520.879

Table 1. Continued

Element	Site	Total Obs.	Censored Obs.	Lower 95% CL	Median	Upper 95% CL
	U (NPR1)	25	13	105.871	152.634	220.053
	U-CR	20	12	71.402	178.055	444.015
	U-ELK	6	4	48.277	146.435	444.165
CE	D (NPR1)	24	0	0.823	0.962	1.123
	D (NPR2)	12	0	0.629	0.769	0.939
	U (NPR1)	25	4	0.499	0.618	0.765
	U-CR	20	1	1.259	1.607	2.051
	U-ELK	6	0	0.827	1.042	1.312
CL	D (NPR1)	24	0	847.006	1117.39	1473.900
	D (NPR2)	12	0	1381.849	1750.013	2216.265
	U (NPR1)	25	0	900.508	1035.716	1191.225
	U-CR	20	0	622.551	956.858	1470.686
	U-ELK	6	0	1493.425	1626.204	1770.788
CO	D (NPR1)	24	0	0.315	0.408	0.530
	D (NPR2)	12	0	0.297	0.392	0.518
	U (NPR1)	25	0	0.256	0.305	0.365
	U-CR	20	0	0.386	0.448	0.521
	U-ELK	6	0	0.223	0.287	0.371
CR	D (NPR1)	24	0	1.100	1.357	1.675
	D (NPR2)	12	0	1.118	1.686	2.542
	U (NPR1)	25	3	0.464	0.691	1.029
	U-CR	20	0	2.424	2.962	3.621
	U-ELK	6	0	1.833	2.116	2.444
CS	D (NPR1)	24	7	0.049	0.062	0.078
	D (NPR2)	12	7	0.035	0.048	0.067
	U (NPR1)	25	14	0.022	0.033	0.050
	U-CR	20	2	0.088	0.106	0.127
	U-ELK	6	0	0.082	0.092	0.104
CU	D (NPR1)	24	0	16.595	18.721	21.118
	D (NPR2)	12	0	15.802	17.927	20.337

Table 1. Continued

Element	Site	Total Obs.	Censored Obs.	Lower 95% CL	Median	Upper 95% CL
	U (NPR1)	25	0	15.683	18.750	22.417
	U-CR	20	1	22.129	25.144	28.569
	U-ELK	6	0	16.640	17.926	19.311
DY	D (NPR1)	21	7	0.096	0.136	0.192
	D (NPR2)	12	5	0.078	0.108	0.150
	U (NPR1)	18	9	0.073	0.101	0.140
	U-CR	20	2	0.179	0.219	0.268
	U-ELK	6	0	0.196	0.229	0.268
EU	D (NPR1)	24	3	0.013	0.017	0.020
	D (NPR2)	12	7	0.004	0.009	0.017
	U (NPR1)	25	10	0.008	0.011	0.013
	U-CR	20	2	0.023	0.028	0.036
	U-ELK	6	1	0.014	0.017	0.023
FE	D (NPR1)	24	0	547.147	639.389	747.180
	D (NPR2)	12	0	593.185	1024.359	1768.945
	U (NPR1)	25	0	296.864	361.014	439.027
	U-CR	20	0	786.424	912.373	1058.493
	U-ELK	6	0	621.046	731.913	862.572
GA	U-CR	20	18	0.001	0.034	2.105
HF	D (NPR1)	24	3	0.027	0.033	0.041
	D (NPR2)	12	3	0.012	0.020	0.033
	U (NPR1)	25	6	0.016	0.022	0.030
	U-CR	20	0	0.075	0.088	0.104
	U-ELK	6	0	0.037	0.048	0.062
HG	D (NPR1)	21	0	0.359	0.432	0.519
	D (NPR2)	12	0	0.534	0.790	1.170
	U (NPR1)	18	0	0.397	0.470	0.556
	U-CR	20	0	1.429	1.828	2.339
	U-ELK	6	0	0.287	0.340	0.402
I	D (NPR1)	24	1	1.379	1.952	2.763

Table 1. Continued

Element	Site	Total Obs.	Censored Obs.	Lower 95% CL	Median	Upper 95% CL
	D (NPR2)	12	0	1.209	1.925	3.065
	U (NPR1)	25	0	1.464	1.990	2.703
	U-CR	20	3	0.565	0.951	1.599
	U-ELK	6	0	0.597	0.690	0.797
IN	D (NPR2)	12	11	0.000	0.002	0.013
	U-CR	20	19	0.000	0.002	0.017
K	D (NPR1)	24	1	94.355	123.853	162.572
	D (NPR2)	12	0	74.854	104.580	146.112
	U (NPR1)	25	7	21.532	39.708	73.230
	U-CR	20	1	199.928	275.046	378.389
	U-ELK	6	0	192.495	251.999	329.896
LA	D (NPR1)	24	0	0.46	0.421	0.511
	D (NPR2)	12	0	0.225	0.278	0.343
	U (NPR1)	25	0	0.213	0.267	0.335
	U-CR	20	0	0.614	0.723	0.850
	U-ELK	6	0	0.422	0.508	0.611
LU	D (NPR1)	24	5	0.002	0.003	0.005
	D (NPR2)	12	4	0.001	0.002	0.004
	U (NPR1)	25	14	0.000	0.001	0.002
	U-CR	20	2	0.005	0.007	0.011
	U-ELK	6	0	0.006	0.007	0.009
MG	D (NPR1)	24	4	111.045	163.03	239.369
	D (NPR2)	12	2	102.794	158.212	243.507
	U (NPR1)	25	7	70.818	102.715	148.980
	U-CR	20	1	207.166	250.566	303.058
	U-ELK	6	0	264.725	315.849	376.846
MN	D (NPR1)	24	0	5.196	6.596	8.373
	D (NPR2)	12	0	4.651	7.506	12.113
	U (NPR1)	25	0	2.827	3.812	5.139
	U-CR	20	0	6.882	9.044	11.887

Table 1. Continued

Element	Site	Total Obs.	Censored Obs.	Lower 95% CL	Median	Upper 95% CL
	U-ELK.	6	0	5.554	6.617	7.884
MO	D (NPR1)	24	8	0.049	0.104	0.223
	D (NPR2)	12	6	0.013	0.047	0.171
	U (NPR1)	25	11	0.019	0.043	0.098
	U-CR	20	2	0.230	0.315	0.432
	U-ELK.	6	1	0.062	0.120	0.231
NA	D (NPR1)	24	0	47.682	58.859	72.656
	D (NPR2)	12	0	24.713	39.386	62.771
	U (NPR1)	25	0	19.296	27.454	39.061
	U-CR	20	0	60.215	81.332	109.854
	U-ELK.	6	0	82.737	108.608	142.569
ND	D (NPR1)	24	17	0.180	0.313	0.544
	U (NPR1)	25	21	0.201	0.300	0.449
	U-CR	20	8	0.451	0.577	0.739
	U-ELK.	6	2	0.447	0.523	0.611
NI	D (NPR2)	12	10	0.001	0.103	7.905
	U (NPR1)	25	23	0.003	0.096	3.090
	U-CR	20	13	0.221	0.720	2.352
	U-ELK.	6	4	0.042	0.519	6.493
RB	D (NPR1)	24	6	0.529	0.747	1.054
	D (NPR2)	12	9	0.011	0.097	0.884
	U (NPR1)	25	16	0.135	0.256	0.485
	U-CR	20	2	1.237	1.606	2.084
	U-ELK.	6	1	0.583	1.089	2.034
SB	D (NPR1)	24	0	0.047	0.069	0.101
	D (NPR2)	12	0	0.056	0.093	0.154
	U (NPR1)	25	0	0.026	0.034	0.043
	U-CR	20	0	0.130	0.171	0.225
	U-ELK.	6	0	0.033	0.045	0.061
SC	D (NPR1)	24	0	0.131	0.159	0.192

Table 1. Continued

Element	Site	Total Obs.	Censored Obs.	Lower 95% CL	Median	Upper 95% CL
	D (NPR2)	12	0	0.091	0.114	0.143
	U (NPR1)	25	0	0.073	0.087	0.104
	U-CR	20	0	0.254	0.294	0.340
	U-ELK	6	0	0.194	0.226	0.263
SE	D (NPR1)	24	0	0.852	0.934	1.024
	D (NPR2)	12	0	0.978	1.174	1.410
	U (NPR1)	25	0	0.865	0.945	1.033
	U-CR	20	0	0.907	1.054	1.224
	U-ELK	6	0	1.422	2.182	3.348
SM	D (NPR1)	24	0	0.053	0.064	0.078
	D (NPR2)	12	0	0.038	0.046	0.056
	U (NPR1)	25	0	0.032	0.040	0.049
	U-CR	20	0	0.087	0.106	0.130
	U-ELK	6	0	0.068	0.080	0.094
TA	D (NPR1)	24	21	0.000	0.005	0.091
	D (NPR2)	12	5	0.039	0.054	0.075
	U (NPR1)	25	19	0.004	0.014	0.052
	U-CR	20	11	0.019	0.043	0.095
	U-ELK	6	4	0.017	0.040	0.093
TH	D (NPR1)	24	0	0.157	0.186	0.221
	D (NPR2)	12	0	0.110	0.134	0.164
	U (NPR1)	25	2	0.068	0.097	0.140
	U-CR	20	0	0.251	0.297	0.351
	U-ELK	6	0	0.210	0.251	0.299
TI	D (NPR1)	24	3	27.098	36.788	49.942
	D (NPR2)	12	2	17.258	25.589	37.942
	U (NPR1)	25	9	11.100	17.466	27.483
	U-CR	20	1	39.928	50.975	65.080
	U-ELK	6	0	52.928	65.697	81.547
U	D (NPR1)	24	5	0.038	0.073	0.140

Table 1. Continued

Element	Site	Total Obs.	Censored Obs.	Lower 95% CL	Median	Upper 95% CL
	D (NPR2)	12	6	0.002	0.015	0.120
	U (NPR1)	25	8	0.017	0.034	0.066
	U-ELK	6	1	0.026	0.059	0.136
V	D (NPR1)	24	0	1.486	2.012	2.724
	D (NPR2)	12	0	1.070	1.453	1.973
	U (NPR1)	25	0	0.875	1.359	2.110
	U-CR	20	1	1.335	1.931	2.793
	U-ELK	6	0	2.450	2.782	3.160
W	D (NPR1)	24	14	0.018	0.036	0.074
	D (NPR2)	12	10	0.001	0.012	0.148
	U (NPR1)	25	18	0.012	0.020	0.034
	U-CR	20	13	0.027	0.041	0.064
YB	D (NPR1)	24	3	0.016	0.021	0.029
	D (NPR2)	12	1	0.014	0.018	0.022
	U (NPR1)	25	9	0.006	0.010	0.016
	U-CR	20	2	0.033	0.044	0.060
	U-ELK	6	0	0.028	0.035	0.044
ZN	D (NPR1)	24	0	146.681	153.881	161.435
	D (NPR2)	12	0	146.972	156.94	167.587
	U (NPR1)	25	0	127.240	135.711	144.745
	U-CR	20	0	125.99	136.893	148.729
	U-ELK	6	0	138.422	144.471	150.784

3.2 FOX CHARACTERISTICS

Differences among foxes in age and gender might influence fur composition. Analysis of covariance (where the covariate was site) demonstrated that fur from fox pups was statistically different from adult fur for most elements. The differences between male and female adult foxes were not statistically significant except for selenium. Selenium averaged 1.3 times as high in females as in males, which is a small difference relative to differences among sites. There were no significant interactions between sex and site except for selenium, which was particularly high in the three female foxes from the Elkhorn Plain.

Fox pups had lower fur concentrations of nearly all measured elements than adults. Because this result suggests that contaminant exposure is greatest in adults, analysis of fur from pups was discontinued after the first batch.

For the statistical analyses discussed in the following sections, data for kit fox fur from both sexes were aggregated and data for pups and the gray fox were deleted. Because potential seasonal effects may influence comparisons of Elkhorn and Camp Roberts with other sites, those effects are separately analyzed and discussed.

3.3 SITES

The major explanatory variable for differences among samples of kit fox hair is site. Statistically significant differences among sites were detected for all elements except Cl, Co, and V (Table 2). However, most elemental concentrations were not highest on the oil fields. Of the 34 elements with <50% censoring, Camp Roberts fur had the highest median concentrations for 21 elements and second highest for 6; Elkhorn Plain fur was highest and second highest for 7 and 17 elements, respectively; developed NPR-1 fur was highest and second highest for 1 and 6 elements, respectively; NPR-2 fur was highest and second highest for 4 and 4 elements (all NPR-2 foxes were from highly developed sites); and undeveloped NPR-1 fur was not highest or second highest for any elements but was lowest for 23 and second lowest for 8. In other words, fur from the undeveloped reference sites had the highest concentrations for most elements, fur from portions of NPR-1 with <15% disturbance had the lowest concentrations for most elements and sites with extensive oil development had intermediate concentrations for most elements.

Because fur samples were not collected randomly, differences among sites in fur concentrations are confounded with differences in the year that the samples were taken. That is, fur was collected at Elkhorn Plain only in 1981, on NPR-2 and Camp Roberts only in 1990, but on NPR-1 in 1981, 1982, and 1990. The small differences among years on NPR-1 relative to the differences among sites suggests that variation among sites is not significantly affected by the year

Table 2. Ranking and arithmetic and statistical comparison of median concentrations of elements detected in kit fox fur. The sites are developed portions of NPR-1 (D1), undeveloped portions of NPR-1 (U1), developed portions of NPR-2 (D2), Camp Roberts (CR), and the Elkhorn Plain (EP). Sites followed by the same lower case letter are not statistically significantly different. Median fur concentrations from sites underlined did not differ by as much as a factor of two from those from the highest site.

Element	Lowest				Highest
Al	U1a	D2ab	D1b	EPbc	CRc
As	U1a	CRa	EPa	D1a	D2b
Au	D1a	U1a	D2a	EPa	CRb
Ba	U1a	D2b	EPb	CRb	D1b
Br	CRa	U1ab	D2ab	D1b	EPb
Ce	U1a	D2ab	D1b	EPb	CRc
Cl	CRa	U1a	D1a	EPa	D2a
Co	EPa	U1a	D2a	D1a	CRa
Cr	U1a	D1b	D2b	EPb	CRc
Cs	U1a	D2ab	D1bc	EPcd	CRd
Cu	EPa	D2a	D1a	U1a	CRb
Dy	U1a	D2a	D1ab	CRc	EPc
Eu	D2a	U1a	EPab	D1b	CRc
Fe	U1a	D1b	EPb	CRb	D2b
Hf	D2a	U1a	D1b	EPb	CRc
Hg	EPa	D1a	U1ab	D2b	CRc
I	EPa	CRa	U1b	D2b	D1b
K	U1a	D2b	D1b	EPc	CRc
La	U1a	D2ab	D1b	EPbc	CRc
Lu	U1a	D2ab	D1bc	EPcd	CRd
Mg	U1a	D2ab	D1b	CRb	EPb
Mn	U1a	D1ab	EPab	D2ab	CRb
Mo	U1a	D2a	D1a	EPab	CRb
Na	U1a	D2ab	D1b	CRb	EPb
Rb	D2a	U1a	D1b	EPbc	CRc
Sb	U1a	EPab	D1b	D2bc	CRc
Sc	U1a	D2ab	D1bc	EPcd	CRd
Se	D1a	U1a	CRa	D2a	EPb

Table 2. Continued

Element	Lowest				Highest
Sm	U1a	D2ab	D1b	EPbc	CRc
Th	U1a	D2ab	D1bc	EPcd	CRd
Ti	U1a	D2ab	D1bc	CRc	EPc
U[a]	CR	D2	U1	EP	D1
V	U1a	D2a	CRa	D1a	EPa
Yb	U1a	D2ab	D1b	EPbc	CRc
Zn	U1a	CRab	EPab	D1ab	D2b

[a]Tests of differences could not be performed.

of collection. However, the possibility that there were site-date interactions cannot be disproved with this data set.

3.4 SEASONS

Foxes have distinct summer and winter pelts that may differ in elemental composition. Fur from NPR-1 and NPR-2 was collected in all months of the year except February, March, and October. However, fur collection on NPR-1 and -2 occurred primarily in summer (July–September) and winter (December). All fur from Elkhorn was collected in November. None of the fur from Camp Roberts was collected in December or January, and the modal month was August with 35% of the samples. Winter and summer fur were compared by comparing samples from the three months in which all foxes are believed to have summer coats (June, July and August) with those from the three months in which all foxes are believed to have winter coats (November, December, and January). Some foxes are transitional in other months in some years.

With the use of analysis of variance (ANOVA), statistically significant interactions between site and season were found for K, Lu, Mg, Sb, Sm, and V. Statistically significant differences between seasons were found for Al, Ce, Cr, Cu, Eu, I, K, La, Lu, Mg, Mn, Mo, Na, Rb, Sc, Sm, Th, Ti, U, V, and Yb. Of those elements, all but Ce, La, and Sc differed by a factor of two between seasons for at least one site, and K, Rb, and U differed by a factor of ten at one site each. All elements except iodine that were statistically different in fur between seasons were higher in winter fur than summer fur. Also, seasonal differences were more common on undeveloped NPR-1 than other sites. All elements except iodine that were statistically different in fur between seasons at any site were statistically different and differed by more than 2*X* on undeveloped NPR-1.

Fifteen of the 20 elements that were statistically significantly higher in winter than summer also were higher at Camp Roberts than other sites (the exceptions are I, which is highest on developed NPR-1, and Mg, Na, Ti and V, which are highest on Elkhorn). Therefore, if the seasonal differences observed on NPR-1 also hold at the other sites, the seasonally unbalanced sampling at the other sites may bias the comparisons of sites. The high concentrations at Camp Roberts would be a little higher if seasonally balanced samples had been collected there. The high Mg, Na, Ti, and V in fur from Elkhorn may be attributable in part to seasonal differences. Cases in which fur concentrations from NPR-1 or NPR-2 are higher than those from Camp Roberts may be attributed in part to the lack of winter values for Camp Roberts. To test this possibility, ANOVAs were run for summer fur only. Summer fur concentrations were still lower on Camp Roberts than on one or more NPR sites for As, Ba, Fe, I, U, and Zn. Camp Roberts summer fur was higher than developed NPR-1 summer fur for Cl, but there were still no statistical differences

among sites for Cl. Therefore, the seasonal differences do not appear to significantly influence the ranking of sites.

The differences between seasons and among sites can be summarized by a canonical discriminant analysis using only the 15 uncensored elements to discriminate among the nine combinations of season and site and the 67 fur samples that were taken in either the summer or winter. This statistical technique defines the relationship of sets of samples (season/site combinations) by arraying them on the axes (the canonical variants, or CVs) that maximize their separation within the 15 dimensional space of element concentrations in fur. The first CV accounts for 44% of the variance, and the first three CVs together account for 81% of the variance among site-season combinations. As can be seen in Fig. 1, the first CV separates the two undeveloped reference sites from the three NPR sites, the second CV separates NPR-2 from NPR-1, and the third CV separates developed and undeveloped NPR-1.

All three CVs contribute to discrimination of seasons, but the differences between seasons within sites are generally small relative to the differences between sites. Those differences can be quantified as the squared Mahalanobis's distance between the centroids of the season-site combination in the space defined by the three canonical variates. The average distance between sites within seasons (19) is nearly twice the average distance between seasons at a site (11). Nearly all of the differences between site-season combinations are statistically significant (i.e., the distances are significantly >0), but they are not practically significant in that they do not change the conclusions about differences between sites.

3.5 DISTURBANCE

A preliminary analysis of data from the initial 20 fur samples found differences in elemental concentrations between foxes from disturbed and undisturbed home ranges on NPR-1. It was this finding that led to analysis of more kit fox fur samples from NPR-1 and analysis of fur from the reference sites. *Disturbance* was defined to include any physical development of the area such as well pads, sumps, roads, land farms, and other facilities. Undisturbed home ranges were those with <15% of the area occupied by such disturbances.

An analysis of covariance (ANOCOVA) was performed for the relationship of fur concentrations to percent disturbance on NPR-1 and NPR-2, in which the covariate is site (data in Appendix A). Statistically significant positive correlations of fur concentrations with percent development were found for Al, As, Ba, Ce, Cs, Eu, Fe, Hf, K, La, Lu, Mg, Mn, Mo, Na, Sb, Sc, Sm, Th, Ti, U, V, and Yb on both oil fields, for Rb on NPR-1 alone, and for Hg on NPR-2 alone. These 23 elements are 66% of the 35 elements for which the test could be performed (i.e., those with <50% censoring). No statistically significant negative correlations of fur concentrations with

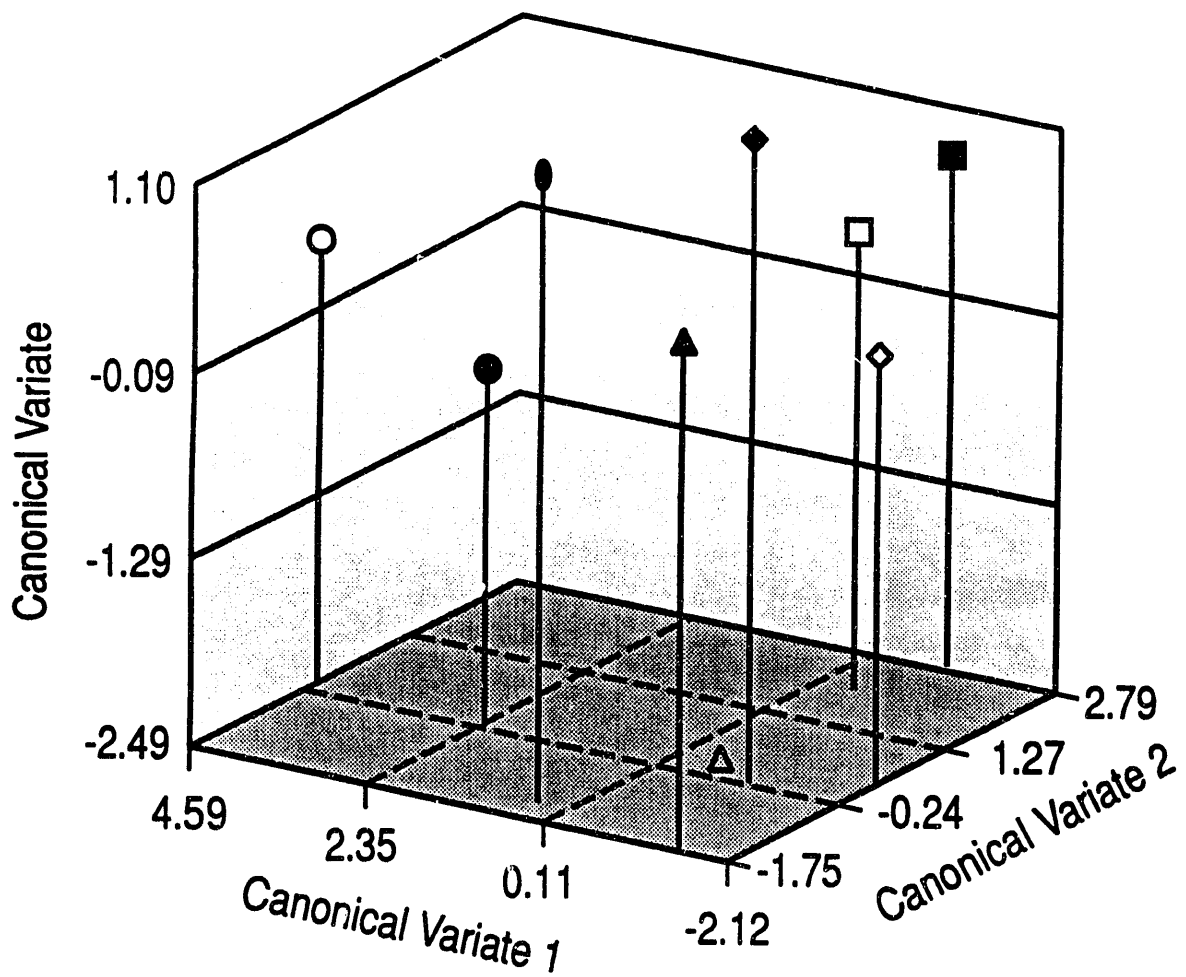

Fig. 1. A plot of the nine site-season combinations in the space defined by the first three principal components of the elemental concentrations in kit fox fur. The open symbols are summer fur and the black symbols are winter fur. Circles are Camp Roberts, ovals are Elkhorn Plain, triangles are undeveloped NPR-1, diamonds are developed NPR-1, and squares are NPR-2.

disturbance were found. For Al, Au, Ce, Cl, Cs, Hf, La, Lu, Cs, Sc, Se, Sm, Th, Ti, U, and V the concentrations in fur from the two oil fields were statistically different after allowing for differences in development. For a given level of development, fur concentrations are estimated to be higher on NPR-1 than NPR-2 for all of those elements except Au, Cl, Se, and Ti. These results are consistent with the idea that foxes with greater exposure to oil development have greater uptake of most mineral elements, and that exposure is higher on the more active oil field (NPR-1).

Another ANOCOVA was performed to evaluate the differences in fur concentrations between sites (NPR-1 and Camp Roberts) after adjusting for two covariates, concentrations in soil samples from the home ranges of the foxes, and percent disturbance of those home ranges. There were no statistically significant positive correlations of fur concentrations with soil concentrations either for NPR-1 or for NPR-1 and Camp Roberts combined. In fact, although fox fur concentrations varied considerably among sites, median soil concentrations at NPR-1 and Camp Roberts were quite similar. The only elements with median concentrations in soil that differed by more than a factor of two between those sites were Cr and Hg, which were higher at Camp Roberts. Those two elements plus Au, Cd, Hf, Ni, and Pb had statistically higher concentrations in soil at Camp Roberts than NPR-1. As, Eu, and Sr were statistically higher in soil from NPR-1 than Camp Roberts.

Soil concentrations and percent disturbance were shown to be uncorrelated for all elements. Given that most element concentrations in fur were correlated with disturbance levels but the correlation was not due to some effect on soil concentration, we attempted to determine what aspect of disturbance was associated with the effect. Two aspects of disturbance that could be quantified were the number of wells in the foxes' home ranges at the time the sample was taken (total wells) and the number of wells drilled in the home ranges during the 2 years prior to collection of each fur sample (new wells). This question was addressed by performing ANOCOVAs like those for disturbance with total wells and new wells as covariate with sites (NPR-1 and NPR-2). These analyses showed that total wells was a better predictor of fur concentrations than disturbance, and new wells was a worse predictor than disturbance. Total wells was statistically correlated with fur concentrations for the 23 elements that were correlated with disturbance plus Cr, Dy, and Se. The new-wells category was statistically correlated with fur concentrations for only 11 elements, but the category included two elements, cobalt and rubidium, that were not statistically correlated with total wells. More important, the correlations of fur concentrations were best for 70% of elements for total wells versus 19% of elements for disturbance and 11% of elements for new wells (based on correlation coefficients for the uncensored elements and log likelihood for censored elements).

In these statistical analyses of patterns of fur concentrations, the statistical significances are based on a maximum allowable Type I error rate of 0.05. This is the comparison-wise error rate. However, given the large number of elements that were analyzed, the total, or experiment-wise, Type I error could be considerably larger. That is, the likelihood that at least one of the relationships found between a fur concentration and one of the independent variables is due to chance is much more than 0.05. This caveat does not negate the utility of the analyses discussed above. However, it does emphasize the importance of considering which differences are consistent across elements and therefore are unlikely to be due to chance, which are large as well as statistically significant, and which have plausible mechanistic explanations.

3.6 INDIVIDUAL FOXES

Toxic effects may result from abnormally high exposures of a few animals within a population rather than high exposures for the population as a whole. Therefore, the statistical patterns discussed in the previous section may not address the problem because a population with low average fur concentrations may have a few individuals with extremely high concentrations (see the ranked fur concentrations in Appendix A). High fur concentration foxes may be arbitrarily defined as those with concentrations in the top decile for each element. Foxes with fur concentrations in the top decile for individual elements are listed in Table 3.

If high concentrations are due to exposure to a common source, foxes that were relatively high for one element in that source would be expected to be relatively high for others that were high in that source. The relative ranking may not be the same because of contributions from multiple sources and differences among foxes and sites, but if rankings are similar, then a common source is suggested. A cross tabulation of frequencies with which foxes that were in the top decile for one element were also in the top decile for another element reveals a cluster of elements that co-occur >50% of the time in top decile foxes. They are Al, Ce, Cs, Eu, Hf, K, La, Lu, Mg, Na, Nd, Rb, Sc, Sm, Th, Ti, and Yb. These are 45% of the elements that were above detection limits in >10% of the foxes. The foxes that were highest for these elements were almost entirely from Camp Roberts, the site with the highest median concentration for 62% of the elements. The fact that this pattern of highest concentrations in fur of individual foxes is the same as the pattern of median concentrations suggests that the source of the highest exposures for most elements is pervasive rather than localized. The most likely common source for these elements is soil.

Nine elements (As, Ba, Br, Co, Dy, U, V, W, and Zn) may cause high exposures in individual NPR-1 foxes. That is, they occur in the top decile of foxes more frequently than expected, and for all but arsenic, an NPR-1 fox was highest. Four of these elements (As, Ba, U, and Zn) also had median concentrations that were higher on NPR-1 than other sites. The other

Table 3. Foxes with concentrations in their fur that fall within the top decile of concentrations of an element, the site where the fox occurred, the month sampled, the number of elements in the top decile for each fox, and the identity of the elements.

Obs.	Fox ID	Site	Month	Top Decile	Elements
1	3589	U-CR	5	22	AL BA CE CR CS DY EU FE HF K LA LU MG NA ND RB SC SE SM TH TI YB
2	3845	U-CR	4	22	AL CA CE CR CS DY EU FE HF K LA LU MG NA ND NI RB SC SM TH TI YB
3	3727	U-CR	10	21	AL AU CE CL CR EU HF K LA LU MO NA ND NI RB SB SC SM TH TI YB
4	3893	U-CR	6	20	AL BA CA CE CO CS CU DY EU HF LA LU MG MN ND RB SC SM TA TH
5	1318	D (NPR1)	12	19	BA CE CO CS DY K LA LU MG NA ND RB SC SM TH TI U W YB
6	3895	U-CR	10	19	AL AU CE CS CU DY EU HF K LA NA ND NI RB SB SM TH TI YB
7	3806	U-CR	8	16	AL CE CR CS CU DY EU HG LU MN MO SB SC TH TI YB
8	3819	U-CR	4	15	AL CE CS CU DY EU HF HG K LA SC SM TA TH YB
9	1326	D (NPR1)	1	9	MG MN MO ND SM TI U V W
10	3817	U-CR	8	9	AU CO FE HF HG I LA LU SC
11	3810	U-CR	8	9	AU CE EU LA LU RB SM TH YB
12	3399	U-CR	10	8	AL AU CL DY HF SC YB ZN
13	1350	D (NPR1)	1	7	CA MG MN MO ND U W
14	1757	U-ELK.	11	7	BR K MG NA RB SE TI
15	1681	D (NPR1)	9	6	BA BR CO DY SB U
16	3684	D (NPR2)	8	6	AS FE HG I MN W
17	3212	U-CR	8	6	AL CL CR HF LU NI
18	3884	U-CR	11	6	AU CA HG K MO NA
19	3868	U-CR	10	6	BR CL HG MO NI SB
20	4616		12	5	AS FE HG MN W
21	2065	D (NPR1)	8	5	AS I MO RB TA
22	4328	D (NPR2)	8	4	FE MN NI ZN
23	3700	D (NPR2)	12	4	AS FE U ZN
24	3818	U-CR	4	4	AU EU HG SE

Table 3. Continued

Obs.	Fox ID	Site	Month	Top Decile	Elements
25	4385#2	D (NPR2)	12	4	AS FE MN U
26	3562	D (NPR2)	6	4	AS CL CR SB
27	1736	D (NPR1)	9	4	BA CU SE TA
28	1348#1	D (NPR1)	12	4	BA BR CL I
29	3612	U (NPR1)	4	4	CA CU I MN
30	1771	U-ELK	11	4	K MG NA TI
31	3883	U-CR	8	4	CA MO SB TA
32	3590	U-CR	5	4	CR CS CU HG
33	4703	D (NPR2)	12	3	CO SE ZN
34	4654	D (NPR1)	12	3	CO U ZN
35	4704	D (NPR2)	12	3	AS CR W
36	1425	D (NPR1)	12	3	BA BR CA
37	4355	U (NPR1)	8	3	AU CU I
38	1424	D (NPR1)	12	3	BR CL CO
39	1408	D (NPR1)	12	3	AS SB V
40	4106	U-CR	7	3	AU I TA
41	4640	D (NPR2)	8	3	I SB U
42	1320	U (NPR1)	12	3	CR I V
43	1324	D (NPR1)	9	2	V ZN
44	2063	D (NPR1)	8	2	W ZN
45	4626	U (NPR1)	7	2	TA ZN
46	4663#2		12	2	TA ZN
47	3180	D (NPR2)	12	2	CL CO
48	1758	U-ELK	11	2	NI SE
49	4343	D (NPR2)	12	2	BA FE
50	1759	U-ELK	11	2	BR SE
51	1611	D (NPR1)	12	2	BR W
52	1731	D (NPR1)	9	2	BA W
53	1756	U-ELK	11	2	NI SE
54	1776	U (NPR1)	12	2	MO U

Table 3. Continued

Obs.	Fox ID	Site	Month	Top Decile	Elements
55	4682	D (NPR2)	8	1	AS
56	1304	U (NPR1)	12	1	CA
57	136	U (NPR1)	12	1	V
58	3393	U-CR	9	1	SE
59	1314	U (NPR1)	12	1	V
60	1419	D (NPR1)	11	1	BR
61	3250	U (NPR1)	7	1	CO
62	125	U (NPR1)	12	1	V
63	1745	U (NPR1)	9	1	CS
64	3713		11	1	MG
65	4380#1	U (NPR1)	8	1	TA
66	1348#2	D (NPR1)	8	1	ND
67	4373#2	D (NPR1)	8	1	CA
68	1345	U (NPR1)	12	1	V
69	1784	U (NPR1)	12	1	V
70	3989	D (NPR1)	12	1	CL
71	3784#2	U (NPR1)	11	1	NA
72	4304	U (NPR1)	7	1	CU
73	4073	U (NPR1)	5	1	NI

six elements may occur at locally high concentrations on NPR-1 to which individual foxes are exposed. Of particular interest are bromine and tungsten. For these two elements the top five and three foxes, respectively, are from developed NPR-1, and 67% and 78%, respectively, of the top decile foxes are from developed NPR-1. These high frequencies of relatively high values are likely to be indicative of significant local sources of exposure only if there are large differences in concentration. This appears to be the case for As, U, and W, for which maximum fur concentrations are more than ten times as high as median concentrations on NPR-1.

3.7 OTHER FACTORS

Two of the planned lines of inference (Sect. 1.1) were not successful. First, it was not possible to associate fur concentrations with longevity or fecundity. Sufficient fecundity data were not available, and longevity data were available for only 21 foxes. Longevity was not correlated with fur concentrations for any of the elements that appeared to be high on NPR-1. This could be because

1. there is no association between longevity and elemental concentrations;
2. there is an association but the sample size is too small to detect it; or
3. an association exists, but it is not detected because the sample is biased.

Second, it was not possible to identify geographical clusters of foxes with high concentrations of elements that were elevated in fur on NPR-1. Spatial associations could not readily be statistically analyzed given the existing form of the kit fox data. However, foxes with high concentrations were plotted on maps, and no spatial associations were apparent.

3.8 CONCENTRATIONS OF OIL-RELATED OR HAZARDOUS ELEMENTS

Particular attention must be paid to results for those elements that are associated with oil development or are hazardous.

Arsenic — Concerns about arsenic arise from the use of the arsenical water treatment chemical W-41 on NPR-1 between 1922 and 1970. Median arsenic concentrations in fur were higher on the developed portions of NPR-1 and NPR-2 than on other sites. Median arsenic concentrations in soil were lower on Camp Roberts (4.0 ppm) than on either developed or undeveloped NPR-1 (6.8 and 6.7 ppm, respectively). Seasonality did not significantly influence arsenic concentrations in fur. Arsenic concentrations were extraordinarily variable among foxes (>2,600 x) but had only moderately high variance among sites (4.3 x), suggesting that localized sources are operating. Arsenic in fur was not statistically significantly correlated with soil concentrations but was statistically significantly positively correlated with percent disturbance, total wells, and new wells. Time to death after collection of the fur sample is not correlated with

arsenic concentrations in fur for the 21 foxes for which death dates are available. However, none of these had arsenic levels in fur >0.6 ppm.

In toxicological terms, the outstanding fox in this study is 4616, which contained 26 ppm arsenic in its fur. This is above levels found in some humans that died of arsenic poisoning (Chatt and Katz 1988). This fox lived north of NPR-1 along the California aqueduct. All of the other high-arsenic foxes were from the developed oil fields (Appendix A). The source of the arsenic exposure and the fate of fox 4616 are unknown. However, the fact that the animal was alive and active suggests that the two foxes with concentrations a little above 3 ppm (the level that is suggestive of toxicity in humans—Jenkins 1979) may not have been at risk.

Barium — Concern about barium arises from the use of barite in drilling fluids. The median barium concentration in fur from the developed portions of NPR-1 was higher than on any other site. However, the median fur barium levels varied by only a factor of 3.8 among sites, and the only statistically significant differences among sites were between undeveloped NPR-1 and all other sites. The fox with the highest level of barium in fur (51 ppm) was from developed NPR-1, seven of the top ten were from developed NPR-1, and one was from developed NPR-2. However, the second- and fourth- highest barium concentrations were from Camp Roberts. Barium concentrations in fur on both oil fields were significantly correlated with both percent disturbance and the number of wells. These results suggest that exposure of foxes to oil-associated barium on NPR-1 has had a small influence on fur concentrations relative to other sites.

Chromium — Chromium, as lignochromates and hexavalent chromium salts, was a component of drilling fluids on NPR-1 during the period 1975–82. However, chromium occurs in kit fox fur at lower median concentrations on NPR-1 than on any other site, and the median soil concentration at Camp Roberts is higher than that of either developed or undeveloped NPR-1 soil. The fact that the highest chromium concentration in fur (7.7 ppm) is from NPR-2—and four of the top ten fur concentrations are from developed oil fields, despite the higher median fur concentration and higher soil concentrations at Camp Roberts— suggests that a few foxes may be exposed to localized oil development-associated chromium. Chromium concentrations in fur were significantly correlated with the number of wells on both oil fields, but not with percent disturbance. The reported chromium concentrations in kit fox fur are not particularly high relative to values reported for wildlife or humans (Table 4).

Selenium — Although selenium is not associated with oil production, it is given particular attention because of the concern raised by selenium toxicity at the Kesterson Refuge and because one fox from NPR-1 was found to have a relatively high selenium concentration in liver tissue by Bureau (n.d.). Median selenium concentrations in fur were higher at all other sites than either developed or undeveloped NPR-1. In addition, the range of selenium concentrations in fur across

Table 4. Ranges of metal concentrations (ppm) in hair of individual kit foxes relative to other concentrations in hair.

Metal	NPR-1 Kit Foxes	NPR-2 Kit Foxes	Other Site Kit Foxes	Wildlife	Teton Coyotes[3]	High Exposure Areas	Human Normal	Human Toxic
Alumninum	66.8–1710	110.0–881	68.6–2830				5[4]	
Antimony	0.008–1.4	0.017–0.44	<0.005–0.60	<0.2–12[3]	0.09–1.8		0.03–24[2]	
Arsenic	0.03–4.7	0.15–5.4	<0.01–26			0.3–8.9[5,6] b	0.0–2.0[2]	3[2]
Bromine	3.6–66	8.4–23	1.9–26				30[4]	
Calcium	<67–1000	<67–400	<67–2800				497[10]	
Cerium	<0.3–2.3	0.4–1.5	<0.3–3.0	<1–20[3]	1.9–2.6			
Chromium	<0.1–3.9	0.7–7.7	<0.1–5.8	<0.3–640[3]	0.7–5.8	3.9–4.8[9c]	0.0–40[2]	
Cobalt	0.15–2.40	0.21–1.15	0.14–1.10				0.1[4]	
Copper	0.015–54	11–23	12–48			6.9–8.3[2d]	7.8–120[2]	
Iron	151–1430	282–4150	270–5500	<21–6400[3]	23–160		26.7[10]	
Magnesium	<40–640	<40–360	<40–660				56.7[10]	
Manganese	0.95–31.70	2.13–27.70	1.74–50.60				0.3[4]	
Mercury	0.21–1.2	0.28–3.9	0.25–10	<0.008–10.7[3]	<0.008–2.8	9.8–117.5[1i]	0.01–30[2]	50–200[2]
Nickel	<1–7	<1–10	<1–8	0.18–1.7[2]			0.0–11[2]	
Gold	0.0007–0.065	0.0015–0.011	0.0013–0.135	<0.04–0.6[3]	0.002–0.04			
Potassium	<28–360	41–250	<28–1300				67.6[10]	
Rubidium	<0.3–2.9	<0.3–1.5	<0.3–3.7	5.8–8.3[3a]				

Table 4. Continued

Metal	NPR-1 Kit Foxes	NPR-2 Kit Foxes	Other Site Kit Foxes	Wildlife	Teton Coyotes[3]	High Exposure Areas	Human Normal	Human Toxic
Scandium	0.04–0.46	0.06–0.21	0.05–0.54	<0.05–2[3]	0.005–0.009			
Selenium	0.60–1.8	0.90–3.0	0.50–4.2	0.08–17[3]	0.8–7.83	3.8–12[8e]	0.3–13[2]	8–30[2]
			0.71–27[f]			0.89–13[8]		
						0.97–18[h]		
Silver	<0.1–0.2	<0.1	<0.1–0.3	<0.04–110[3]	0.06–12			
Sodium	4.1–212.0	6.6–98.0	14.0–208.0				309[10]	
Titanium	<14–120.0	<14–58.0	<14–114.0				4[4]	
Vanadium	0.3–11.5	0.6–3.2	<0.1–4.4				0.006–2.7[2]	
Zinc	93–220	118–178	87–180	13–6300[3]	91–620		65–200[7]	

[a]Rodents from areas of heavily mineralized soils in Idaho.
[b]Livestock grazing near smelters; reference animals had 0-0.46ppm.
[c]Cotton rats from near cooling towers using chromate corrosion inhibitors; reference rats had 0.39ppm.
[d]Livestock grazing near smelters; reference animals had 6.8-7.8ppm.
[e]Rats fed nominally toxic levels of Se; control rats had 0.6ppm.
[f]Kit foxes from Bakersfield.
[g]Kit foxes from the Kesterson Reservoir.
[h]Coyotes from the Kesterson Reservoir.
[i]Cats from the vicinity of Minamata, Japan.

[1]Doi 1973.
[2]Jenkins 1979.
[3]Huckabee 1972.
[4]Lenihan 1978.
[5]Lewis 1972.
[6]Orheim 1974.
[7]Petering 1971.
[8]Schroeder et al. 1970.
[9]Taylor 1975.
[10]Barker 1976.

individuals is small (8.4 x), and no fur from oil fields was exceptionally high. Maximum kit fox fur concentrations in this study were lower than those reported from Bakersfield and Kesterson or from other analyses of wildlife fur (Table 4).

Sodium — Sodium may be used as a marker for consumption of produced water, which is primarily a NaCl solution (Appendix C). Produced-water consumption is a concern because of reports of wildlife drinking from sumps on NPR-1 and reports of livestock becoming sick or dying as a result of drinking produced water (Suter 1988). The range of fur concentrations is wide for sodium (over 50x), but the highest median concentrations are from Elkhorn Plain and Camp Roberts and the highest concentrations in individuals came from Camp Roberts, Elkhorn, and undeveloped NPR-1.

Vanadium — Vanadium occurs in relatively high concentrations in oil [as high as 0.1% in whole oil and ~65% in ash by weight (Venugopal and Lucky 1978)]. Vanadium is used as a marker for petroleum's contribution to air pollution (Rahn and Lowenthal 1985), and cattle have experienced vanadium poisoning upon ingesting fuel-oil soot (Ter Heege 1964). Therefore, vanadium may be a marker for fox exposure to oil spills or oily wastes. The median vanadium concentration in fur was highest at Elkhorn, but the differences among sites were small (2.04 x) and not statistically significant. These results are complicated by the significant site-season interaction for this element, which may have contributed to the high concentrations on Elkhorn. All of the top ten individuals were from NPR-1, and six were from the undeveloped portion, although undeveloped NPR-1 had the lowest median vanadium concentration in fur. Vanadium concentrations in fur are significantly correlated with percent development on both NPR-1 and NPR-2. The range from the lowest to the highest fur concentration (Camp Roberts and developed NPR-1 samples, respectively) was large (115 x). The two highest fur concentrations (both from developed NPR-1) were approximately four times the maximum normal vanadium concentration in human hair. These results are ambiguous but are consistent with slightly elevated exposures of individual foxes to oil-related vanadium.

3.9 ELEMENT CONCENTRATIONS IN SOILS

The review of data related to potential chemical contamination of NPR-1 published in Suter (1988) found that some unusually high and unusually low elemental concentrations had been reported for NPR-1 soils. Therefore, the results of soil analyses conducted for this study were compared to values for soils compiled for the United States and the western United States by the U.S. Geological Survey (USGS) (Shacklette and Boerngen 1984) and for the world by Bowen (1979). The 85 soil samples collected on NPR-1 for this project and the 10 samples collected from Camp Roberts had (except for uranium) elemental concentrations that were typical of the

western United States and within the world wide range for uncontaminated soils. The exceptionally high soil concentrations of Cd, Mo, and Se previously reported in analyses performed for EG&G and BPOI (Suter 1988) were not confirmed. However, the highest uranium concentration measured in this study (13 mg/kg) is higher than the highest value reported in the USGS survey (7.9 mg/kg) and Bowen's world review (9 mg/kg). The second- and third-highest NPR-1 values (7.8 and 6.1 mg/kg) are nearly as high as the highest USGS value. These three values are all from Torriorthents Very Thin (TVT) soils; all TVT soils, regardless of development, have U concentrations >3 mg/kg; all but one sample from any Torriorthent soil had U >3 mg/kg; and only one nontorriorthent soil had U >3 mg/kg. Therefore, it seems likely that the high soil concentrations are a natural feature of the soil.

3.10 WATER CONCENTRATIONS

Elemental concentrations of produced waters are reported in Appendix D. Concentrations are quite high (>1,000 mg/L) for Ca, Cl, Fe, Mg, Mn, and Na. Cadmium, Cu, Mo, and Sr exceed their national water quality criteria of drinking water, drinking water maximum contaminant levels, or health advisory concentration (Etnier et al. 1992). Silver, Be, Cr, Ni, Pb, Se, V, and Zn were below those benchmarks. For As, Ba, Cr, Hg, Sb, and Th the relationship of the water to standards is unclear because the limits of detection are above one or more standards. These concentrations are relevant to the potential contributions of elements to fur concentrations and to any toxic effects resulting from multiple routes of exposure rather than to estimations of the actual toxicity of the water. The toxicity of these waters is likely to be due to the total mineral content, which would create a tremendous osmotic burden on animals that drank it. This is believed to be the cause of death in most cases where livestock have been killed by drinking produced water (McCoy and Edwards 1980). Kit foxes are desert animals whose tolerance for saline drinking water is unknown.

4. DISCUSSION

This study reports the elemental content of kit fox fur from four sites: an oil field where kit fox abundance declined precipitously between 1980 and 1985 and has continued to slowly decline (NPR-1), a nearby oil field where kit fox numbers were relatively high and stable during the period 1983–1985 (NPR-2), and two areas with no oil development: one of which (Elkhorn) had increasing kit fox abundance in the 1980–1984 period, and the other of which (Camp Roberts) has no estimates of kit fox abundance for that period but still had a relatively large

number of foxes when first studied in 1988. From 1988 to 1991 at Camp Roberts and from 1986 to 1991 at all other sites, kit fox abundances declined. This decline in the late 1980s is apparently due to regional climatic factors but in any case is not attributable to oil development.

Because oil development on NPR-1 increased in the period immediately before and during the early 1980s kit fox decline, it can be hypothesized that toxic chemicals associated with oil production contributed to the decline. A previous report (Suter 1988) indicated that the contaminants of concern are either toxic mineral elements or materials with distinctive elemental compositions. Hair analysis of humans has proved highly useful in the diagnosis of both mineral deficiencies and toxicities (Jenkins 1979; Chatt and Katz 1988) and has been used in prior studies monitoring wildlife (Huckabee et al. 1972, 1973; Jenkins 1979; Talmage and Walton 1991). Therefore, if toxic effects were responsible for the decline, it is expected that the exposures that caused the effects would be detected in the elemental analysis of the fur taken from foxes during that period. Specifically, one would expect that some elements would be higher in kit foxes from developed portions of NPR-1 than from any of the other sites. Elevated levels on both developed NPR-1 and NPR-2 would suggest that foxes on oil fields are exposed to oil field materials but those exposures were not the cause of the decline. Elements that were not higher in foxes from oil fields than in foxes from other sites could not be shown to be associated with oil development and could not be responsible for the decline on NPR-1.

Concentrations of most mineral elements were higher in foxes from the developed portions of NPR-1 than the undeveloped portions and were correlated with the percent development of each fox's home range. In addition, elemental concentrations in fur were not correlated with concentrations of composite samples of undisturbed soil from the foxes' home ranges. Therefore, the differences in fur concentrations apparently are not due to differences either in background soil concentrations or in widely distributed soil contaminants. This suggests that some aspect of oil development causes foxes to have increased exposure to a variety of mineral elements, and the magnitude of exposure is not determined by concentrations in undisturbed soil. However, because oil development is not randomly distributed on the site (e.g., it is mostly at higher elevations), it is possible that some other environmental variable is responsible for the observed pattern of fur concentrations.

Most elements are not high in fur from NPR-1 relative to reference sites with no oil development. In fact, for most elements the differences between developed and undeveloped NPR-1 are due to exceptionally low concentrations in fur from undeveloped NPR-1 rather than exceptionally high concentrations from developed NPR-1. For most elements, fur concentrations averaged higher on Camp Roberts than on any other site, and fur from Elkhorn tended to be second highest. These results indicate that most foxes on the oil fields are not receiving

exceptionally high exposures to metals or nonmetal elements, and most elements can apparently be eliminated as causes of the population declines on NPR-1.

Few elements even come close to fitting the pattern of high concentrations on oil fields (developed NPR-1 and NPR-2), lower concentrations on the periphery of oil fields (undeveloped NPR-1), and lowest concentrations in areas with no oil development (Camp Roberts and Elkhorn). Only iodine fits that pattern perfectly, but there is relatively little difference in iodine (or any other halogen) among sites, except that fur from the Elkhorn Plain is relatively low in iodine (Table 1). Iodine is a well-regulated nutrient element, so this pattern is as likely to reflect deficiency as toxicity. Arsenic, U, and Zn all roughly fit the pattern in which developed NPR-1 or NPR-2 runs highest and an undeveloped site, lowest. These patterns are consistent with exposure to oil development–related materials. As previously discussed in Sect. 3.8, As has been associated with oil development, but there is no known source of U or Zn in oil-development materials.

Uranium has not been previously analyzed in samples of ambient media or wastes from NPR-1. It was not detected in produced water at a detection limit of 0.005 ppm. Soil concentrations average a little higher on NPR-1 than on Camp Roberts, and although most NPR-1 concentrations are typical of the western United States a few are exceptionally high (Sect. 3.9). Because the highest uranium concentrations were found in samples from the survey of soil types rather than in the samples taken from fox home ranges, their influence is not reflected in the regressions of fur concentrations against soil concentrations. Therefore, although it was not possible to statistically test for a relationship between high concentrations in fur and soil, it seems likely that the high concentrations of uranium on NPR-1 contribute to the high concentrations in fur. Uranium has a low oral toxicity to laboratory rodents but a moderately high toxicity when they receive it through inhalation or injection, apparently because of their gastrointestinal uptake (Venugopal and Lucky 1978; Carson et al. 1986). No studies of uranium concentrations in fur from other sites have been found.

The high zinc concentrations in fur from oil fields relative to other sites cannot be clearly associated to any oil-related material and are not indicative of toxicity. Prior studies have reported zinc to occur at levels as high as 110 mg/L in sumps on NPR-1 (Suter 1988), but the measurements taken by this program found a maximum of 0.073 mg/L, which is well below safe drinking water standards. Zinc concentrations in soil are similar on NPR-1 and Camp Roberts and typical of the western United States (Shacklette and Boerngen 1984). Zinc is an essential element that has low mammalian toxicity (Venugopal and Lucky 1978; Carson et al. 1986). Zinc concentrations in NPR-1 fur are not high relative to those reported in other studies (Table 4).

It is not necessary to establish the cause of the high mineral levels in fur from Camp Roberts before using the fact of the high levels to interpret events on NPR-1. That is, the

elimination of exposure to high levels of mineral elements as a cause of the precipitous decline in the early 1980s of the NPR-1 kit fox population follows from the fact that kit fox populations at Camp Roberts and Elkhorn Plain have higher exposures to most elements (from whatever source) than foxes on the oil fields. However, plausible hypotheses as to the cause of the high levels at Camp Roberts would make the results more convincing to a skeptical audience. Differences in soil composition apparently do not explain the differences between Camp Roberts and NPR-1. That is, fur concentrations do not increase with increasing soil concentrations of any element. One class of possible explanations is that the bioavailabilities of elements in soil differ among sites due to differences in the forms of the elements in the soil. Bioavailability may differ due to differences in soil texture, organic matter, clay content, or soil chemistry. This hypothesis is plausible but can not be addressed because very little is known about the bioavailability of elements in soil to mammals. Another class of explanations is differences in the magnitude of exposure to soil. These differences would include differences in the behavior of the foxes, such as variations in food habits.

Food habits are a potentially important contributor to the variance in exposure to mineral elements among foxes. Kit foxes at NPR-1 and NPR-2 feed primarily on lagomorphs (black-tailed jack rabbits and desert cottontails) and secondarily on kangaroo rats (Scrivner et al. 1987, EG&G 1987). Those at Camp Roberts feed primarily on California ground squirrels and secondarily on lagomorphs and kangaroo rats (EG&G 1991). Food habits on Elkhorn Plain are unknown. If foxes consume more soil with ground squirrels than with lagomorphs or kangaroo rats, that could explain the higher levels of most mineral elements in fur from Camp Roberts. Kit foxes consume the pelt and gut contents of the prey, so any soil in the fur or gut will be ingested. It is the senior author's unquantified impression that ground squirrels have more soil in their fur than the other prey animals, but this has not been confirmed. In addition to soil in fur or gut, the prey will contain elements that they have assimilated, which may come from plant food items, ingestion of soil with food, or by grooming.

Kangaroo rats consume seeds, which have low levels of minerals relative to the foliage consumed by the other prey animals. On the other hand, California ground squirrels, unlike lagomorphs, consume roots as well as foliage, which would increase soil consumption (Martin et al. 1951). In other words, for many elements measured in fur, soil may be the primary source of exposure, but the differences in fur concentrations may be due to differences in direct or indirect soil intake with prey or by other routes rather than differences in soil composition. This hypothesis explains much of the data, but it must be considered speculative at this time.

All of the elements that tend to be in the top decile of fur concentrations in the same samples (Sect. 3.4) and all of the elements that are highest at Camp Roberts except Au, Cu, and

Hg are also higher on developed NPR-1 than undeveloped NPR-1. If the relatively high levels of these elements at Camp Roberts are attributed to high soil intake rates, then the same source could be responsible for the differences in those elements on NPR-1. However, the cause of the difference in soil ingestion is apparently not greater ground squirrel predation on developed than undeveloped NPR-1. Physical disturbance of the soil may simply make soil more available to foxes through ingestion or inhalation. Acceptance of this hypothesis—that differences in fur concentrations of most elements are because of differences in rates of soil uptake by the foxes—would serve to further focus attention on the elements that are not part of that group of elements and are higher in fur from developed NPR-1 than Camp Roberts (i.e., As, Ba, U, V, and Zn).

In sum, the analyses of elements in fur, soils, and produced water suggest that foxes on developed oil fields have higher exposures to some elements than foxes in adjoining areas, but they do not reveal any patterns of exposure that could explain the decline of kit foxes on NPR-1. Most elements are higher in fur from reference sites with no oil development than on NPR-1 or NPR-2. Elements that are high on the oil fields still do not, for a variety of reasons discussed above suggest biologically significant exposures to oil development-related materials or toxic effects.

5. CONCLUSIONS

All inferences concerning causation in epidemiological studies and other uncontrolled studies are incompletely conclusive. That is, causation cannot be proved, but defensible conclusions can be reached on the basis of the weight of evidence. It is particularly difficult to provide a convincing case for a negative causal hypothesis, such as exposure to chemicals associated with oil development did not cause the decline of kit foxes on NPR-1. Finally, inference is uncertain when, as in this case, the data are from samples that were not taken according to a statistical design (i.e., the samples were not taken for the purposes of this study). The following conclusions result from a weighing of the evidence generated by this study.

Table 5 presents a summary of the lines of inference concerning concentrations of elements in kit fox fur as evidence of a potential relationship between exposure to oil development on NPR-1 and the decline of the kit fox population. High element concentrations in fur are taken to be indicative of high exposures to those elements. For most elements, median fur concentrations are higher in samples from developed NPR-1 and NPR-2 than undeveloped NPR-1 (32/40 elements), and in samples from developed NPR-1 than developed NPR-2 (28/40 elements).

Table 5. Summary of evidence concerning the relationship between elemental concentrations in kit fox fur and exposure to oil field materials. "Y" indicates that the condition is met for that element, which is supportive of the hypothesis that an elevated fur concentration is caused by exposure to oil development.

	Developed > Undeveloped NPR-1[a]	Developed NPR-1 > Developed NPR-2[b]	Developed NPR-1 > Reference Sites[c]	NPR-1 Individuals High[a]	Oil Elements High on NPR-1[d]	Correlated to Disturbance[e]	NPR-1 > Reference Wildlife (Human)[f]
Al	Y	Y				Y	(Y)
As	Y		Y	Y	Y	Y	(Y)
Au							?
Ba	Y	Y	Y	Y	Y	Y	?
Br	Y	Y		Y			(Y)
Ca		Y			n	?	(Y)
Ce	Y	Y				Y	N
Cl	Y				n		?
Co	Y	Y		Y			(Y)
Cr	Y				N		(Y)
Cs	Y	Y				Y	?
Cu		Y					N
Dy	Y	Y		Y			?
Eu	Y	Y				Y	?
Fe	Y				n	Y	N
Hf	Y	Y				Y	?
Hg							N
I	Y	Y	Y				?
K	Y	Y				Y	(Y)
La	Y	Y				Y	?
Lu	Y	Y				Y	?
Mg	Y	Y			n	Y	(Y)
Mn	Y				n	Y	(Y)
Mo	Y	Y				Y	?
Na	Y	Y			n	Y	(N)
Nd	Y	Y				?	?
Ni						?	(N)
Rb	Y	Y					?
Sb	Y					Y	N

Table 5. Continued

	Developed > Undeveloped NPR-1[a]	Developed NPR-1 > Developed NPR-2[b]	Developed NPR-1 > Reference Sites[c]	NPR-1 Individuals High[g]	Oil Elements High on NPR-1[d]	Correlated to Disturbance[e]	NPR-1 > Reference Wildlife (Human)[f]
Sc	Y	Y				Y	?
Se						Y	N
Sm	Y	Y				Y	?
Ta						?	?
Th	Y	Y				Y	?
Ti	Y	Y				Y	(Y)
U	Y	Y	Y	**Y**		Y	?
V	Y	Y		**Y**	N	Y	Y
W	Y	Y		Y		?	?
Yb	Y	Y				Y	?
Zn	Y		Y	Y			N

[a]Y indicates elements that had a higher median concentration on developed than undeveloped NPR-1.
[b]Y indicates elements that had a higher median concentration on developed NPR-1 than NPR-2.
[c]Y indicates elements that had a higher median concentration on developed NPR-1 than on Camp Roberts or Elkhorn.
[d]Y indicates elements that had a high median concentration on developed NPR-1 and are associated with oil development; N indicates elements that are associated with oil development but are not elevated on developed NPR-1; and n indicates elements that occur at high concentrations in NPR-1 produced waters but are not elevated in fur from developed NPR-1.
[e]Y indicates elements that are statistically correlated with either percent development or the number or wells in the fox's approximate home range, and ? indicates that the correlation could not be estimated.
[f]Y and N indicate elements that are and are not elevated in fur from NPR-1 relative to concentrations reported in fur from other wildlife, (Y) and (N) indicate elements that are and are not elevated in fur from NPR-1 relative to normal human hair, ? indicates that no data are available for comparison, and a bold Y indicates concentrations that are indicative of toxicity in other species.
[g]Y indicates that individual foxes from NPR-1 appear in the top decile of concentrations for this element more frequently than expected. **Y** indicates that the range of concentrations among individuals is >100x.

These results suggest that foxes on an active oil field (NPR-1) have greater exposure to mineral elements than those on an inactive oil field or those on adjacent undeveloped land.

The relative ranking of fur concentrations from developed NPR-1 to NPR-2 and undeveloped NPR-1 could be due to background geology or other factors other than oil development activity. However, for 23 of the 34 elements for which correlations could be determined, fur concentrations were statistically correlated with the number of oil wells or the estimated percent development of their home ranges. Because there is variation in these variables within each of the three sites, these correlations tend to strengthen the hypothesis that some aspect of oil development increases the exposure of foxes to mineral elements.

The preceding comparisons of sites and fox home ranges with different degrees of development suggest that local differences in oil development influence exposure, but they do not indicate whether any of the exposures are exceptionally high. For this inference, foxes from these sites must be compared with foxes from sites that are not associated at all with oil development. For nearly all elements (36/40), median fur concentrations were higher on reference sites that had no oil development. Hence, the NPR-1 exposure levels are not exceptionally high for most elements, but undeveloped NPR-1 exposure levels appear to be exceptionally low. The elements that are higher on oil fields are As, Ba, I, U, and Zn.

The preceding conclusions are based on comparisons of median foxes. It is also important to consider the possibility that a few foxes on developed NPR-1 have been highly exposed even though most foxes have not. Of the five elements that had high median concentrations on developed NPR-1, all but iodine also had large numbers of individuals from NPR-1 in the top decile of concentrations. In addition, foxes from developed NPR-1 occur more consistently than expected in the top decile of fur concentrations for Br, Co, Dy, V, and W.

The foregoing inferences address relative exposure of foxes on different studied sites but do not directly address the source of the exposure. Of the elements that have high median concentrations on developed NPR-1 relative to other sites, arsenic and barium are associated with oil development. In addition, foxes from developed NPR-1 had a higher-than-expected frequency of vanadium concentrations in the top decile of fur concentrations. Although differences between medians among sites were small and not statistically significant, the median vanadium concentration was higher on NPR-1 than any site except the Elkhorn Plain. Vanadium is associated with petroleum. Although relatively high concentrations of As, Ba, and V suggest that fur analysis can detect the exposure of foxes to oil field materials, they do not indicate whether effects have occurred.

Most elements tend to covary; they are highest on Camp Roberts and Elkhorn, intermediate on developed NPR-1 and NPR-2, and lowest on undeveloped NPR-1. The existence

of this group of elements suggests that some pervasive source such as soil is responsible. Because concentrations of these elements in fur are not correlated with concentrations in soil, it seems likely that differences in exposure are a result of differences in bioavailability or ingestion.

A few elements are high in fur from NPR-1 but are not known to be associated with oil development. These include U and Zn, which have both higher median values and high frequency of top decile individuals on developed NPR-1 than other sites; I, which has a high median value but not a high frequency of top decile individuals on developed NPR-1; and Br, Co, Dy, and W, which do not have high median concentrations but have a high frequency of top decile individuals on developed NPR-1. It seems likely that the high U concentrations in fur are associated with high concentrations found in some NPR-1 soils, but none of those soils were included in the samples taken from kit fox home ranges. The causes of the other high levels are unclear. As was discussed previously, when so many elements are analyzed, some may appear elevated due to chance.

The significance of these results should be interpreted in terms of the magnitude of the fur concentrations relative to those reported for other wildlife, livestock, and humans. All of the elements for which data existed on wildlife background fur concentrations were not unusually high in NPR-1 fox fur. Comparisons of fox fur to human hair are more tenuous, but for ten elements, concentrations in fox fur were higher than those in normal human hair. Of these, only arsenic was high on developed NPR-1.

Because background data and toxicity data for fur are unavailable for most elements, the significance of the concentrations must be examined in other ways. Element concentrations are more likely to be indicative of toxicity if their magnitudes are large relative to concentrations in other foxes or sites than if they are similar in all foxes or sites. Arsenic is once again exceptional in having a range of >2,600x among foxes. Uranium and vanadium also have an unusually large range among individuals (>130x and 115x, respectively) due to exceptionally high concentrations in some foxes on NPR-1, but several of the elements that are high at Camp Roberts also have ranges of >100. None of the elements with <50% censoring have ranges in median concentrations across sites that exceed a factor of eight. This is small relative to the differences in hair concentrations that usually separate normal populations of mammals from those experiencing toxic effects of metals (Jenkins 1979; Chatt and Katz 1988).

The only element that raises clear toxicological concern is arsenic. Both median and maximum arsenic concentrations in fur are higher on developed oil fields than other sites, and arsenic concentrations vary greatly among foxes. Arsenic concentrations in some fox fur on NPR-1 and NPR-2 are higher than the threshold for sublethal toxic effects in humans, and one fox from an area north of NPR-1 had a fur level that was greater than concentrations found in human

lethalities. The existence of this living and apparently healthy fox with a fur concentration of 26 ppm suggests that the foxes on NPR-1 and -2 with relatively high fur concentrations (3–5 ppm) may not be experiencing toxic effects. In addition, it is unlikely that arsenic is responsible for the kit fox decline on NPR-1 because arsenic concentrations have been high on NPR-2 also.

In sum, foxes on developed NPR-1 appear to have elevated exposures to As and Ba and possibly V, which may be attributable to oil field materials, and elevated I, U, and Zn which appear to have other causes. Arsenic may be associated with toxic effects, but only a small number of foxes have significantly elevated arsenic levels, and arsenic levels are not higher on NPR-1 than NPR-2. Therefore, it appears unlikely that arsenic was responsible for the precipitous decline in the NPR-1 kit fox population that occurred in the early 1980s. There is no evidence that kit foxes were exposed to chromate or to produced water on NPR-1 or NPR-2.

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APPENDIX A.

Concentrations of elements in fur arranged by element and sorted in descending order of concentration.

All concentrations are ppm except for gold which are ppb. Negative signs indicate that the element was not detected; the number following a minus sign is the limit of detection. DATE is the date that the fur sample was collected. SITEs are designatied as D for disturbed by oil development or U for undisturbed. AVGIST is the average estimated percent disturbance of the fox's home range.

OBS	FOX_ID	DATE	SITE	AVGDIST	AG
1	3727	10/12/90	U-CR	.	0.3
2	4355	08/01/90	U (NPR1)	1.0	0.2
3	1304	12/29/81	U (NPR1)	3.4	0.1
4	1326	01/06/82	D (NPR1)	21.9	0.1
5	125	12/22/81	U (NPR1)	3.0	-0.1
6	1309	11/19/81	D (NPR1)	19.3	-0.1
7	1314	12/18/81	U (NPR1)	7.0	-0.1
8	1318	12/29/81	D (NPR1)	17.4	-0.1
9	1320	12/23/81	U (NPR1)	17.7	-0.1
10	1324	09/02/81	D (NPR1)	21.9	-0.1
11	1345	12/22/81	U (NPR1)	13.8	-0.1
12	1348#1	12/22/81	D (NPR1)	17.6	-0.1
13	1348#2	08/03/82	D (NPR1)	17.6	-0.1
14	1350	01/08/82	D (NPR1)	26.0	-0.1
15	136	12/15/81	U (NPR1)	3.1	-0.1
16	1408	12/23/81	D (NPR1)	21.4	-0.1
17	1419	11/19/81	D (NPR1)	25.3	-0.1
18	1423	12/23/81	D (NPR1)	16.2	-0.1
19	1424	12/22/81	D (NPR1)	18.0	-0.1
20	1425	12/23/81	D (NPR1)	16.2	-0.1
21	1611	12/22/81	D (NPR1)	17.9	-0.1
22	1644	08/25/81	U (NPR1)	13.7	-0.1
23	1681	09/01/81	D (NPR1)	18.5	-0.1
24	1725	09/01/81	D (NPR1)	20.5	-0.1
25	1731	09/03/81	D (NPR1)	21.5	-0.1
26	1733	09/02/81	D (NPR1)	21.5	-0.1
27	1736	09/03/81	D (NPR1)	21.4	-0.1
28	1745	09/01/81	U (NPR1)	13.7	-0.1
29	1756	11/04/81	U-ELK.	.	-0.1
30	1757	11/04/81	U-ELK.	.	-0.1
31	1758	11/04/81	U-ELK.	.	-0.1
32	1759	11/04/81	U-ELK.	.	-0.1
33	1761	11/04/81	U-ELK.	.	-0.1
34	1771	11/04/81	U-ELK.	.	-0.1
35	1776	12/15/81	U (NPR1)	5.7	-0.1
36	1784	12/23/83	U (NPR1)	14.1	-0.1
37	2063	08/03/82	D (NPR1)	17.6	-0.1
38	2065	08/03/82	D (NPR1)	17.6	-0.1
39	3180	12/15/90	D (NPR2)	31.3	-0.1
40	3212	08/22/90	U-CR	.	-0.1
41	3250	07/27/90	U (NPR1)	3.0	-0.1
42	3290	07/25/90	U (NPR1)	3.0	-0.1
43	3393	09/19/90	U-CR	.	-0.1
44	3399	10/05/90	U-CR	.	-0.1
45	3562	06/16/90	D (NPR2)	34.6	-0.1
46	3589	05/10/90	U-CR	.	-0.1
47	3590	05/09/90	U-CR	.	-0.1
48	3612	04/26/90	U (NPR1)	.	-0.1
49	3684	08/23/90	D (NPR2)	50.7	-0.1

OBS	FOX_ID	DATE	SITE	AVGDIST	AG
50	3700	12/12/90	D (NPR2)	41.8	-0.1
51	3713	11/29/90		.	-0.1
52	3784#1	08/03/90	U (NPR1)	3.7	-0.1
53	3784#2	11/28/90	U (NPR1)	2.6	-0.1
54	3792	08/24/90	D (NPR2)	28.9	-0.1
55	3806	08/31/90	U-CR	.	-0.1
56	3808	08/08/90	U-CR	.	-0.1
57	3810	08/02/90	U-CR	.	-0.1
58	3818	04/25/90	U-CR	.	-0.1
59	3819	04/25/90	U-CR	.	-0.1
60	3845	04/26/90	U-CR	.	-0.1
61	3859	08/03/90	U-CR	.	-0.1
62	3868	10/02/90	U-CR	.	-0.1
63	3883	08/01/90	U-CR	.	-0.1
64	3884	11/29/90	U-CR	.	-0.1
65	3893	06/12/90	U-CR	.	-0.1
66	3895	10/19/90	U-CR	.	-0.1
67	3989	12/06/90	D (NPR1)	24.0	-0.1
68	4025	07/25/90	U (NPR1)	3.3	-0.1
69	4073	05/09/90	U (NPR1)	27.3	-0.1
70	4106	07/31/90	U-CR	.	-0.1
71	4304	07/25/90	U (NPR1)	16.4	-0.1
72	4306	08/01/90	U (NPR1)	4.5	-0.1
73	4307	08/03/90		.	-0.1
74	4313	07/25/90	U (NPR1)	12.3	-0.1
75	4326	08/07/90		.	-0.1
76	4328	08/22/90	D (NPR2)	37.4	-0.1
77	4335	12/14/90		.	-0.1
78	4343	12/15/90	D (NPR2)	27.7	-0.1
79	4353	07/31/90	U (NPR1)	.	-0.1
80	4373#1	05/09/90	D (NPR1)	17.6	-0.1
81	4373#2	08/16/90	D (NPR1)	17.6	-0.1
82	4380#1	08/09/90	U (NPR1)	10.3	-0.1
83	4380#2	12/18/90	U (NPR1)	6.1	-0.1
84	4385#2	12/12/90	D (NPR2)	48.1	-0.1
85	4616	12/05/90		.	-0.1
86	4626	07/24/90	U (NPR1)	2.7	-0.1
87	4640	08/22/90	D (NPR2)	50.7	-0.1
88	4654	12/07/90	D (NPR1)	17.9	-0.1
89	4663#2	12/11/90		.	-0.1
90	4682	08/16/90	D (NPR2)	26.0	-0.1
91	4703	12/13/90	D (NPR2)	26.6	-0.1
92	4704	12/15/90	D (NPR2)	25.6	-0.1
93	3817	08/28/90	U-CR	.	-0.3

OBS	FOX_ID	DATE	SITE	AVGDIST	AL
1	3589	05/10/90	U-CR	.	2830
2	3845	04/26/90	U-CR	.	2650
3	3895	10/19/90	U-CR	.	2390
4	3893	06/12/90	U-CR	.	2370
5	3727	10/12/90	U-CR	.	2330
6	3819	04/25/90	U-CR	.	2210
7	3399	10/05/90	U-CR	.	2150
8	3212	08/22/90	U-CR	.	1830
9	3806	08/31/90	U-CR	.	1810
10	1318	12/29/81	D (NPR1)	17.4	1710
11	3810	08/02/90	U-CR	.	1470
12	1757	11/04/81	U-ELK.	.	1400
13	3590	05/09/90	U-CR	.	1360
14	1771	11/04/81	U-ELK.	.	1350
15	3868	10/02/90	U-CR	.	1220
16	1326	01/06/82	D (NPR1)	21.9	1207
17	3393	09/19/90	U-CR	.	1200
18	3859	08/03/90	U-CR	.	1130
19	1350	01/08/82	D (NPR1)	26.0	1120
20	1320	12/23/81	U (NPR1)	17.7	1114
21	3884	11/29/90	U-CR	.	1070
22	1761	11/04/81	U-ELK.	.	1020
23	1731	09/03/81	D (NPR1)	21.5	970
24	1348#1	12/22/81	D (NPR1)	17.6	962
25	3808	08/08/90	U-CR	.	936
26	3818	04/25/90	U-CR	.	921
27	3713	11/29/90		.	904
28	1681	09/01/81	D (NPR1)	18.5	881
29	3562	06/16/90	D (NPR2)	34.6	881
30	3684	08/23/90	D (NPR2)	50.7	880
31	1756	11/04/81	U-ELK.	.	871
32	1345	12/22/81	U (NPR1)	13.8	793
33	1759	11/04/81	U-ELK.	.	776
34	1784	12/23/83	U (NPR1)	14.1	767
35	1419	11/19/81	D (NPR1)	25.3	751
36	1424	12/22/81	D (NPR1)	18.0	742
37	1425	12/23/81	D (NPR1)	16.2	738
38	4385#2	12/12/90	D (NPR2)	48.1	702
39	1304	12/29/81	U (NPR1)	3.4	695
40	1758	11/04/81	U-ELK.	.	678
41	4328	08/22/90	D (NPR2)	37.4	664
42	1309	11/19/81	D (NPR1)	19.3	662
43	1733	09/02/81	D (NPR1)	21.5	652
44	4704	12/15/90	D (NPR2)	25.6	648
45	1324	09/02/81	D (NPR1)	21.9	637
46	2065	08/03/82	D (NPR1)	17.6	586
47	4616	12/05/90		.	582
48	3817	08/28/90	U-CR	.	580
49	1408	12/23/81	D (NPR1)	21.4	574

OBS	FOX_ID	DATE	SITE	AVGDIST	AL
51	3250	07/27/90	U (NPR1)	3.0	552
52	3883	08/01/90	U-CR	.	547
53	1611	12/22/81	D (NPR1)	17.9	479
54	4106	07/31/90	U-CR	.	470.0
55	1725	09/01/81	D (NPR1)	20.5	453.0
56	4343	12/15/90	D (NPR2)	27.7	442.0
57	3792	08/24/90	D (NPR2)	28.9	406.0
58	4654	12/07/90	D (NPR1)	17.9	386.0
59	1644	08/25/81	U (NPR1)	13.7	376.0
60	1314	12/18/81	U (NPR1)	7.0	371.0
61	4073	05/09/90	U (NPR1)	27.3	364.0
62	3989	12/06/90	D (NPR1)	24.0	359.0
63	136	12/15/81	U (NPR1)	3.1	348.0
64	3784#1	08/03/90	U (NPR1)	3.7	327.0
65	4703	12/13/90	D (NPR2)	26.6	321.0
66	3700	12/12/90	D (NPR2)	41.8	314.0
67	1423	12/23/81	D (NPR1)	16.2	308.0
68	4335	12/14/90		.	292.0
69	1736	09/03/81	D (NPR1)	21.4	272.0
70	125	12/22/81	U (NPR1)	3.0	251.0
71	4373#1	05/09/90	D (NPR1)	17.6	250.0
72	2063	08/03/82	D (NPR1)	17.6	248.0
73	1745	09/01/81	U (NPR1)	13.7	247.0
74	3290	07/25/90	U (NPR1)	3.0	247.0
75	3612	04/26/90	U (NPR1)	.	242.0
76	1776	12/15/81	U (NPR1)	5.7	239.0
77	4380#2	12/18/90	U (NPR1)	6.1	221.0
78	3180	12/15/90	D (NPR2)	31.3	216.0
79	4682	08/16/90	D (NPR2)	26.0	202.0
80	4373#2	08/16/90	D (NPR1)	17.6	197.0
81	4307	08/03/90		.	180.0
82	4313	07/25/90	U (NPR1)	12.3	163.0
83	1348#2	08/03/82	D (NPR1)	17.6	151.0
84	4663#2	12/11/90		.	151.0
85	4355	08/01/90	U (NPR1)	1.0	122.0
86	4353	07/31/90	U (NPR1)	.	113.0
87	4640	08/22/90	D (NPR2)	50.7	110.0
88	4306	08/01/90	U (NPR1)	4.5	108.0
89	4626	07/24/90	U (NPR1)	2.7	80.9
90	4380#1	08/09/90	U (NPR1)	10.3	79.6
91	4025	07/25/90	U (NPR1)	3.3	74.1
92	4326	08/07/90		.	68.6
93	4304	07/25/90	U (NPR1)	16.4	66.8

OBS	FOX_ID	DATE	SITE	AVGDIST	AS
1	4616	12/05/90		.	26.00
2	3562	06/16/90	D (NPR2)	34.6	5.40
3	1408	12/23/81	D (NPR1)	21.4	4.70
4	4682	08/16/90	D (NPR2)	26.0	2.30
5	3700	12/12/90	D (NPR2)	41.8	1.80
6	4704	12/15/90	D (NPR2)	25.6	1.30
7	2065	08/03/82	D (NPR1)	17.6	1.20
8	3684	08/23/90	D (NPR2)	50.7	0.98
9	4385#2	12/12/90	D (NPR2)	48.1	0.84
10	1318	12/29/81	D (NPR1)	17.4	0.64
11	4343	12/15/90	D (NPR2)	27.7	0.59
12	4663#2	12/11/90		.	0.59
13	4654	12/07/90	D (NPR1)	17.9	0.57
14	3713	11/29/90		.	0.53
15	1350	01/08/82	D (NPR1)	26.0	0.51
16	3817	08/28/90	U-CR	.	0.51
17	4328	08/22/90	D (NPR2)	37.4	0.50
18	1326	01/06/82	D (NPR1)	21.9	0.49
19	1681	09/01/81	D (NPR1)	18.5	0.47
20	3989	12/06/90	D (NPR1)	24.0	0.44
21	1425	12/23/81	D (NPR1)	16.2	0.42
22	1348#1	12/22/81	D (NPR1)	17.6	0.41
23	1736	09/03/81	D (NPR1)	21.4	0.40
24	2063	08/03/82	D (NPR1)	17.6	0.40
25	1731	09/03/81	D (NPR1)	21.5	0.39
26	4335	12/14/90		.	0.39
27	1423	12/23/81	D (NPR1)	16.2	0.38
28	1611	12/22/81	D (NPR1)	17.9	0.38
29	4073	05/09/90	U (NPR1)	27.3	0.36
30	4373#2	08/16/90	D (NPR1)	17.6	0.36
31	1304	12/29/81	U (NPR1)	3.4	0.35
32	1309	11/19/81	D (NPR1)	19.3	0.33
33	1320	12/23/81	U (NPR1)	17.7	0.33
34	1324	09/02/81	D (NPR1)	21.9	0.33
35	1784	12/23/83	U (NPR1)	14.1	0.33
36	1419	11/19/81	D (NPR1)	25.3	0.32
37	1757	11/04/81	U-ELK.	.	0.32
38	3589	05/10/90	U-CR	.	0.32
39	3792	08/24/90	D (NPR2)	28.9	0.32
40	1733	09/02/81	D (NPR1)	21.5	0.31
41	3806	08/31/90	U-CR	.	0.31
42	3884	11/29/90	U-CR	.	0.31
43	1644	08/25/81	U (NPR1)	13.7	0.29
44	3819	04/25/90	U-CR	.	0.29
45	1345	12/22/81	U (NPR1)	13.8	0.28
46	3895	10/19/90	U-CR	.	0.28
47	4640	08/22/90	D (NPR2)	50.7	0.28
48	1725	09/01/81	D (NPR1)	20.5	0.27
49	3893	06/12/90	U-CR	.	0.27

OBS	FOX_ID	DATE	SITE	AVGDIST	AS
50	4703	12/13/90	D (NPR2)	26.6	0.27
51	1424	12/22/81	D (NPR1)	18.0	0.26
52	1745	09/01/81	U (NPR1)	13.7	0.26
53	3810	08/02/90	U-CR	.	0.26
54	1758	11/04/81	U-ELK.	.	0.25
55	1761	11/04/81	U-ELK.	.	0.25
56	3250	07/27/90	U (NPR1)	3.0	0.25
57	3590	05/09/90	U-CR	.	0.25
58	1756	11/04/81	U-ELK.	.	0.24
59	3393	09/19/90	U-CR	.	0.24
60	3845	04/26/90	U-CR	.	0.24
61	1771	11/04/81	U-ELK.	.	0.23
62	1759	11/04/81	U-ELK.	.	0.22
63	3727	10/12/90	U-CR	.	0.22
64	4106	07/31/90	U-CR	.	0.22
65	4373#1	05/09/90	D (NPR1)	17.6	0.22
66	4626	07/24/90	U (NPR1)	2.7	0.22
67	3859	08/03/90	U-CR	.	0.21
68	4380#1	08/09/90	U (NPR1)	10.3	0.21
69	3290	07/25/90	U (NPR1)	3.0	0.20
70	3883	08/01/90	U-CR	.	0.20
71	3612	04/26/90	U (NPR1)	.	0.19
72	3784#1	08/03/90	U (NPR1)	3.7	0.19
73	4380#2	12/18/90	U (NPR1)	6.1	0.19
74	1776	12/15/81	U (NPR1)	5.7	0.18
75	3808	08/08/90	U-CR	.	0.18
76	125	12/22/81	U (NPR1)	3.0	0.17
77	3818	04/25/90	U-CR	.	0.17
78	1348#2	08/03/82	D (NPR1)	17.6	0.16
79	4355	08/01/90	U (NPR1)	1.0	0.16
80	3180	12/15/90	D (NPR2)	31.3	0.15
81	4353	07/31/90	U (NPR1)	.	0.14
82	3784#2	11/28/90	U (NPR1)	2.6	0.13
83	1314	12/18/81	U (NPR1)	7.0	0.12
84	4304	07/25/90	U (NPR1)	16.4	0.12
85	136	12/15/81	U (NPR1)	3.1	0.10
86	3868	10/02/90	U-CR	.	0.10
87	4326	08/07/90		.	0.09
88	4025	07/25/90	U (NPR1)	3.3	0.08
89	4307	08/03/90		.	0.08
90	4306	08/01/90	U (NPR1)	4.5	0.05
91	4313	07/25/90	U (NPR1)	12.3	0.03
92	3212	08/22/90	U-CR	.	0.02
93	3399	10/05/90	U-CR	.	-0.01

OBS	FOX_ID	DATE	SITE	AVGDIST	AU
1	3399	10/05/90	U-CR	.	135.0
2	4355	08/01/90	U (NPR1)	1.0	65.5
3	3817	08/28/90	U-CR	.	46.6
4	3727	10/12/90	U-CR	.	40.4
5	3884	11/29/90	U-CR	.	19.6
6	3818	04/25/90	U-CR	.	19.0
7	3895	10/19/90	U-CR	.	17.7
8	3810	08/02/90	U-CR	.	17.5
9	4106	07/31/90	U-CR	.	17.3
10	3806	08/31/90	U-CR	.	15.5
11	3893	06/12/90	U-CR	.	15.0
12	4626	07/24/90	U (NPR1)	2.7	14.6
13	3883	08/01/90	U-CR	.	13.4
14	3590	05/09/90	U-CR	.	13.2
15	3808	08/08/90	U-CR	.	12.8
16	3868	10/02/90	U-CR	.	12.7
17	3859	08/03/90	U-CR	.	12.0
18	3684	08/23/90	D (NPR2)	50.7	10.8
19	3212	08/22/90	U-CR	.	10.3
20	3589	05/10/90	U-CR	.	8.9
21	4306	08/01/90	U (NPR1)	4.5	8.6
22	1757	11/04/81	U-ELK.	.	8.1
23	4704	12/15/90	D (NPR2)	25.6	8.1
24	1318	12/29/81	D (NPR1)	17.4	7.9
25	125	12/22/81	U (NPR1)	3.0	7.3
26	1756	11/04/81	U-ELK.	.	7.2
27	3393	09/19/90	U-CR	.	6.8
28	3562	06/16/90	D (NPR2)	34.6	6.8
29	4328	08/22/90	D (NPR2)	37.4	6.1
30	4703	12/13/90	D (NPR2)	26.6	5.4
31	3700	12/12/90	D (NPR2)	41.8	5.3
32	3845	04/26/90	U-CR	.	5.3
33	4616	12/05/90		.	5.3
34	1733	09/02/81	D (NPR1)	21.5	4.8
35	1761	11/04/81	U-ELK.	.	4.8
36	4326	08/07/90		.	4.8
37	3819	04/25/90	U-CR	.	4.7
38	3713	11/29/90		.	4.5
39	4335	12/14/90		.	4.3
40	4380#1	08/09/90	U (NPR1)	10.3	4.1
41	1736	09/03/81	D (NPR1)	21.4	3.9
42	3612	04/26/90	U (NPR1)	.	3.8
43	1731	09/03/81	D (NPR1)	21.5	3.7
44	4313	07/25/90	U (NPR1)	12.3	3.7
45	1424	12/22/81	D (NPR1)	18.0	3.6
46	1759	11/04/81	U-ELK.	.	3.6
47	1745	09/01/81	U (NPR1)	13.7	3.4
48	4663#2	12/11/90		.	3.4
49	4385#2	12/12/90	D (NPR2)	48.1	3.3

OBS	FOX_ID	DATE	SITE	AVGDIST	AU
50	1324	09/02/81	D (NPR1)	21.9	3.2
51	1611	12/22/81	D (NPR1)	17.9	3.2
52	4682	08/16/90	D (NPR2)	26.0	3.1
53	1725	09/01/81	D (NPR1)	20.5	2.9
54	1758	11/04/81	U-ELK.	.	2.9
55	4353	07/31/90	U (NPR1)	.	2.8
56	1644	08/25/81	U (NPR1)	13.7	2.7
57	3250	07/27/90	U (NPR1)	3.0	2.7
58	4654	12/07/90	D (NPR1)	17.9	2.7
59	1320	12/23/81	U (NPR1)	17.7	2.6
60	1350	01/08/82	D (NPR1)	26.0	2.5
61	1345	12/22/81	U (NPR1)	13.8	2.4
62	3784#1	08/03/90	U (NPR1)	3.7	2.4
63	1304	12/29/81	U (NPR1)	3.4	2.3
64	1771	11/04/81	U-ELK.	.	2.3
65	3792	08/24/90	D (NPR2)	28.9	2.3
66	2065	08/03/82	D (NPR1)	17.6	2.1
67	4343	12/15/90	D (NPR2)	27.7	2.0
68	4373#1	05/09/90	D (NPR1)	17.6	1.9
69	4373#2	08/16/90	D (NPR1)	17.6	1.9
70	3290	07/25/90	U (NPR1)	3.0	1.8
71	3989	12/06/90	D (NPR1)	24.0	1.8
72	3180	12/15/90	D (NPR2)	31.3	1.7
73	1348#1	12/22/81	D (NPR1)	17.6	1.6
74	1348#2	08/03/82	D (NPR1)	17.6	1.6
75	1681	09/01/81	D (NPR1)	18.5	1.6
76	1309	11/19/81	D (NPR1)	19.3	1.5
77	1419	11/19/81	D (NPR1)	25.3	1.5
78	4640	08/22/90	D (NPR2)	50.7	1.5
79	1784	12/23/83	U (NPR1)	14.1	1.4
80	136	12/15/81	U (NPR1)	3.1	1.3
81	1408	12/23/81	D (NPR1)	21.4	1.3
82	4025	07/25/90	U (NPR1)	3.3	1.3
83	4307	08/03/90		.	1.3
84	1326	01/06/82	D (NPR1)	21.9	1.2
85	3784#2	11/28/90	U (NPR1)	2.6	1.2
86	1314	12/18/81	U (NPR1)	7.0	1.0
87	1423	12/23/81	D (NPR1)	16.2	1.0
88	1425	12/23/81	D (NPR1)	16.2	1.0
89	2063	08/03/82	D (NPR1)	17.6	1.0
90	4380#2	12/18/90	U (NPR1)	6.1	1.0
91	1776	12/15/81	U (NPR1)	5.7	0.9
92	4304	07/25/90	U (NPR1)	16.4	0.9
93	4073	05/09/90	U (NPR1)	27.3	0.7

OBS	FOX_ID	DATE	SITE	AVGDIST	BA
1	1681	09/01/81	D (NPR1)	18.5	51
2	3893	06/12/90	U-CR	.	39
3	4343	12/15/90	D (NPR2)	27.7	35
4	1318	12/29/81	D (NPR1)	17.4	33
5	3589	05/10/90	U-CR	.	30
6	1736	09/03/81	D (NPR1)	21.4	28
7	1348#1	12/22/81	D (NPR1)	17.6	25
8	1731	09/03/81	D (NPR1)	21.5	25
9	1425	12/23/81	D (NPR1)	16.2	23
10	1309	11/19/81	D (NPR1)	19.3	21
11	1326	01/06/82	D (NPR1)	21.9	21
12	1611	12/22/81	D (NPR1)	17.9	21
13	3727	10/12/90	U-CR	.	21
14	1348#2	08/03/82	D (NPR1)	17.6	20
15	1419	11/19/81	D (NPR1)	25.3	20
16	3845	04/26/90	U-CR	.	20
17	1757	11/04/81	U-ELK.	.	17
18	2063	08/03/82	D (NPR1)	17.6	17
19	3562	06/16/90	D (NPR2)	34.6	17
20	3895	10/19/90	U-CR	.	17
21	1350	01/08/82	D (NPR1)	26.0	16
22	1784	12/23/83	U (NPR1)	14.1	16
23	1304	12/29/81	U (NPR1)	3.4	14
24	1745	09/01/81	U (NPR1)	13.7	14
25	3399	10/05/90	U-CR	.	14
26	3819	04/25/90	U-CR	.	14
27	3989	12/06/90	D (NPR1)	24.0	14
28	1725	09/01/81	D (NPR1)	20.5	13
29	3684	08/23/90	D (NPR2)	50.7	13
30	1771	11/04/81	U-ELK.	.	12
31	4073	05/09/90	U (NPR1)	27.3	12
32	1644	08/25/81	U (NPR1)	13.7	11
33	1759	11/04/81	U-ELK.	.	11
34	1761	11/04/81	U-ELK.	.	11
35	2065	08/03/82	D (NPR1)	17.6	11
36	3713	11/29/90		.	11
37	4326	08/07/90		.	11
38	4328	08/22/90	D (NPR2)	37.4	11
39	3212	08/22/90	U-CR	.	10
40	3393	09/19/90	U-CR	.	10
41	3784#2	11/28/90	U (NPR1)	2.6	10
42	3792	08/24/90	D (NPR2)	28.9	10
43	3810	08/02/90	U-CR	.	10
44	3818	04/25/90	U-CR	.	10
45	4616	12/05/90		.	10
46	1320	12/23/81	U (NPR1)	17.7	9
47	1733	09/02/81	D (NPR1)	21.5	9
48	1756	11/04/81	U-ELK.	.	9
49	3612	04/26/90	U (NPR1)	.	9

OBS	FOX_ID	DATE	SITE	AVGDIST	BA
50	3868	10/02/90	U-CR	.	9
51	4704	12/15/90	D (NPR2)	25.6	9
52	125	12/22/81	U (NPR1)	3.0	8
53	3590	05/09/90	U-CR	.	8
54	3784#1	08/03/90	U (NPR1)	3.7	8
55	3859	08/03/90	U-CR	.	8
56	3883	08/01/90	U-CR	.	8
57	3884	11/29/90	U-CR	.	8
58	4385#2	12/12/90	D (NPR2)	48.1	8
59	1324	09/02/81	D (NPR1)	21.9	7
60	3250	07/27/90	U (NPR1)	3.0	7
61	3808	08/08/90	U-CR	.	7
62	1758	11/04/81	U-ELK.	.	6
63	3700	12/12/90	D (NPR2)	41.8	6
64	4654	12/07/90	D (NPR1)	17.9	6
65	1345	12/22/81	U (NPR1)	13.8	4
66	1408	12/23/81	D (NPR1)	21.4	4
67	1314	12/18/81	U (NPR1)	7.0	-1
68	136	12/15/81	U (NPR1)	3.1	-1
69	1776	12/15/81	U (NPR1)	5.7	-1
70	1423	12/23/81	D (NPR1)	16.2	-5
71	1424	12/22/81	D (NPR1)	18.0	-5
72	3180	12/15/90	D (NPR2)	31.3	-5
73	3290	07/25/90	U (NPR1)	3.0	-5
74	3806	08/31/90	U-CR	.	-5
75	4025	07/25/90	U (NPR1)	3.3	-5
76	4106	07/31/90	U-CR	.	-5
77	4304	07/25/90	U (NPR1)	16.4	-5
78	4306	08/01/90	U (NPR1)	4.5	-5
79	4307	08/03/90		.	-5
80	4313	07/25/90	U (NPR1)	12.3	-5
81	4335	12/14/90		.	-5
82	4353	07/31/90	U (NPR1)	.	-5
83	4355	08/01/90	U (NPR1)	1.0	-5
84	4373#1	05/09/90	D (NPR1)	17.6	-5
85	4373#2	08/16/90	D (NPR1)	17.6	-5
86	4380#1	08/09/90	U (NPR1)	10.3	-5
87	4380#2	12/18/90	U (NPR1)	6.1	-5
88	4626	07/24/90	U (NPR1)	2.7	-5
89	4640	08/22/90	D (NPR2)	50.7	-5
90	4663#2	12/11/90		.	-5
91	4682	08/16/90	D (NPR2)	26.0	-5
92	4703	12/13/90	D (NPR2)	26.6	-5
93	3817	08/28/90	U-CR	.	-10

OBS	FOX_ID	DATE	SITE	AVGDIST	BR
1	1348#1	12/22/81	D (NPR1)	17.6	66
2	1424	12/22/81	D (NPR1)	18.0	42
3	1425	12/23/81	D (NPR1)	16.2	34
4	1681	09/01/81	D (NPR1)	18.5	34
5	1611	12/22/81	D (NPR1)	17.9	27
6	1757	11/04/81	U-ELK.	.	26
7	1759	11/04/81	U-ELK.	.	26
8	3868	10/02/90	U-CR	.	26
9	1419	11/19/81	D (NPR1)	25.3	25
10	1758	11/04/81	U-ELK.	.	24
11	3212	08/22/90	U-CR	.	24
12	4703	12/13/90	D (NPR2)	26.6	23
13	1731	09/03/81	D (NPR1)	21.5	21
14	3806	08/31/90	U-CR	.	21
15	4307	08/03/90		.	21
16	1423	12/23/81	D (NPR1)	16.2	20
17	1733	09/02/81	D (NPR1)	21.5	20
18	3399	10/05/90	U-CR	.	20
19	4306	08/01/90	U (NPR1)	4.5	20
20	1745	09/01/81	U (NPR1)	13.7	19
21	1771	11/04/81	U-ELK.	.	19
22	2065	08/03/82	D (NPR1)	17.6	19
23	3250	07/27/90	U (NPR1)	3.0	19
24	3684	08/23/90	D (NPR2)	50.7	19
25	3989	12/06/90	D (NPR1)	24.0	19
26	4343	12/15/90	D (NPR2)	27.7	19
27	4663#2	12/11/90		.	19
28	125	12/22/81	U (NPR1)	3.0	18
29	136	12/15/81	U (NPR1)	3.1	18
30	4616	12/05/90		.	18
31	4654	12/07/90	D (NPR1)	17.9	18
32	4682	08/16/90	D (NPR2)	26.0	18
33	1314	12/18/81	U (NPR1)	7.0	17
34	1318	12/29/81	D (NPR1)	17.4	17
35	1761	11/04/81	U-ELK.	.	17
36	3290	07/25/90	U (NPR1)	3.0	17
37	4353	07/31/90	U (NPR1)	.	17
38	4355	08/01/90	U (NPR1)	1.0	17
39	4626	07/24/90	U (NPR1)	2.7	17
40	1348#2	08/03/82	D (NPR1)	17.6	16
41	1725	09/01/81	D (NPR1)	20.5	16
42	1756	11/04/81	U-ELK.	.	16
43	3727	10/12/90	U-CR	.	16
44	4373#1	05/09/90	D (NPR1)	17.6	16
45	1304	12/29/81	U (NPR1)	3.4	15
46	1736	09/03/81	D (NPR1)	21.4	15
47	3562	06/16/90	D (NPR2)	34.6	15
48	3792	08/24/90	D (NPR2)	28.9	15
49	4313	07/25/90	U (NPR1)	12.3	15

OBS	FOX_ID	DATE	SITE	AVGDIST	BR
50	1644	08/25/81	U (NPR1)	13.7	14
51	1776	12/15/81	U (NPR1)	5.7	14
52	3180	12/15/90	D (NPR2)	31.3	14
53	3784#2	11/28/90	U (NPR1)	2.6	14
54	3808	08/08/90	U-CR	.	14.0
55	1309	11/19/81	D (NPR1)	19.3	13.0
56	1784	12/23/83	U (NPR1)	14.1	13.0
57	2063	08/03/82	D (NPR1)	17.6	13.0
58	3590	05/09/90	U-CR	.	13.0
59	3810	08/02/90	U-CR	.	13.0
60	3895	10/19/90	U-CR	.	13.0
61	4304	07/25/90	U (NPR1)	16.4	13.0
62	4328	08/22/90	D (NPR2)	37.4	13.0
63	4373#2	08/16/90	D (NPR1)	17.6	13.0
64	1320	12/23/81	U (NPR1)	17.7	12.0
65	1408	12/23/81	D (NPR1)	21.4	11.0
66	3700	12/12/90	D (NPR2)	41.8	11.0
67	4025	07/25/90	U (NPR1)	3.3	11.0
68	4380#1	08/09/90	U (NPR1)	10.3	11.0
69	4380#2	12/18/90	U (NPR1)	6.1	11.0
70	4640	08/22/90	D (NPR2)	50.7	11.0
71	3393	09/19/90	U-CR	.	10.0
72	3884	11/29/90	U-CR	.	10.0
73	4073	05/09/90	U (NPR1)	27.3	10.0
74	3817	08/28/90	U-CR	.	9.4
75	3612	04/26/90	U (NPR1)	.	8.9
76	4385#2	12/12/90	D (NPR2)	48.1	8.9
77	4704	12/15/90	D (NPR2)	25.6	8.4
78	3784#1	08/03/90	U (NPR1)	3.7	7.4
79	4335	12/14/90		.	7.4
80	3819	04/25/90	U-CR	.	7.3
81	3713	11/29/90		.	7.1
82	1326	01/06/82	D (NPR1)	21.9	6.8
83	4326	08/07/90		.	6.8
84	3859	08/03/90	U-CR	.	6.4
85	1324	09/02/81	D (NPR1)	21.9	6.2
86	3845	04/26/90	U-CR	.	5.9
87	3589	05/10/90	U-CR	.	5.8
88	1345	12/22/81	U (NPR1)	13.8	5.6
89	4106	07/31/90	U-CR	.	4.1
90	1350	01/08/82	D (NPR1)	26.0	3.6
91	3893	06/12/90	U-CR	.	2.8
92	3818	04/25/90	U-CR	.	2.1
93	3883	08/01/90	U-CR	.	1.9

OBS	FOX_ID	DATE	SITE	AVGDIST	CA
1	3893	06/12/90	U-CR	.	2800
2	3883	08/01/90	U-CR	.	1300
3	1350	01/08/82	D (NPR1)	26.0	1000
4	3612	04/26/90	U (NPR1)	.	700
5	3845	04/26/90	U-CR	.	700
6	3884	11/29/90	U-CR	.	700
7	1304	12/29/81	U (NPR1)	3.4	600
8	1425	12/23/81	D (NPR1)	16.2	600
9	3819	04/25/90	U-CR	.	600
10	4373#2	08/16/90	D (NPR1)	17.6	600
11	1309	11/19/81	D (NPR1)	19.3	500
12	1318	12/29/81	D (NPR1)	17.4	500
13	1644	08/25/81	U (NPR1)	13.7	500
14	1757	11/04/81	U-ELK.	.	500
15	3399	10/05/90	U-CR	.	500
16	3589	05/10/90	U-CR	.	500
17	1423	12/23/81	D (NPR1)	16.2	400
18	3859	08/03/90	U-CR	.	400
19	4703	12/13/90	D (NPR2)	26.6	400
20	1326	01/06/82	D (NPR1)	21.9	325
21	1771	11/04/81	U-ELK.	.	300
22	3784#1	08/03/90	U (NPR1)	3.7	300
23	3784#2	11/28/90	U (NPR1)	2.6	300
24	1320	12/23/81	U (NPR1)	17.7	280
25	1324	09/02/81	D (NPR1)	21.9	278
26	1784	12/23/83	U (NPR1)	14.1	189
27	1345	12/22/81	U (NPR1)	13.8	171
28	136	12/15/81	U (NPR1)	3.1	152
29	125	12/22/81	U (NPR1)	3.0	142
30	1314	12/18/81	U (NPR1)	7.0	138
31	1408	12/23/81	D (NPR1)	21.4	131
32	1776	12/15/81	U (NPR1)	5.7	67
33	1348#1	12/22/81	D (NPR1)	17.6	-200
34	1348#2	08/03/82	D (NPR1)	17.6	-200
35	1419	11/19/81	D (NPR1)	25.3	-200
36	1424	12/22/81	D (NPR1)	18.0	-200
37	1611	12/22/81	D (NPR1)	17.9	-200
38	1681	09/01/81	D (NPR1)	18.5	-200
39	1725	09/01/81	D (NPR1)	20.5	-200
40	1731	09/03/81	D (NPR1)	21.5	-200
41	1733	09/02/81	D (NPR1)	21.5	-200
42	1745	09/01/81	U (NPR1)	13.7	-200
43	1756	11/04/81	U-ELK.	.	-200
44	1758	11/04/81	U-ELK.	.	-200
45	1759	11/04/81	U-ELK.	.	-200
46	1761	11/04/81	U-ELK.	.	-200
47	2063	08/03/82	D (NPR1)	17.6	-200
48	2065	08/03/82	D (NPR1)	17.6	-200
49	3180	12/15/90	D (NPR2)	31.3	-200

OBS	FOX_ID	DATE	SITE	AVGDIST	CA
50	3212	08/22/90	U-CR	.	-200
51	3250	07/27/90	U (NPR1)	3.0	-200
52	3290	07/25/90	U (NPR1)	3.0	-200
53	3393	09/19/90	U-CR	.	-200
54	3562	06/16/90	D (NPR2)	34.6	-200
55	3590	05/09/90	U-CR	.	-200
56	3684	08/23/90	D (NPR2)	50.7	-200
57	3700	12/12/90	D (NPR2)	41.8	-200
58	3713	11/29/90		.	-200
59	3727	10/12/90	U-CR	.	-200
60	3792	08/24/90	D (NPR2)	28.9	-200
61	3808	08/08/90	U-CR	.	-200
62	3810	08/02/90	U-CR	.	-200
63	3818	04/25/90	U-CR	.	-200
64	3868	10/02/90	U-CR	.	-200
65	3895	10/19/90	U-CR	.	-200
66	3989	12/06/90	D (NPR1)	24.0	-200
67	4025	07/25/90	U (NPR1)	3.3	-200
68	4073	05/09/90	U (NPR1)	27.3	-200
69	4304	07/25/90	U (NPR1)	16.4	-200
70	4306	08/01/90	U (NPR1)	4.5	-200
71	4307	08/03/90		.	-200
72	4313	07/25/90	U (NPR1)	12.3	-200
73	4326	08/07/90		.	-200
74	4328	08/22/90	D (NPR2)	37.4	-200
75	4335	12/14/90		.	-200
76	4343	12/15/90	D (NPR2)	27.7	-200
77	4353	07/31/90	U (NPR1)	.	-200
78	4355	08/01/90	U (NPR1)	1.0	-200
79	4373#1	05/09/90	D (NPR1)	17.6	-200
80	4380#1	08/09/90	U (NPR1)	10.3	-200
81	4380#2	12/18/90	U (NPR1)	6.1	-200
82	4385#2	12/12/90	D (NPR2)	48.1	-200
83	4616	12/05/90		.	-200
84	4626	07/24/90	U (NPR1)	2.7	-200
85	4640	08/22/90	D (NPR2)	50.7	-200
86	4654	12/07/90	D (NPR1)	17.9	-200
87	4663#2	12/11/90		.	-200
88	4682	08/16/90	D (NPR2)	26.0	-200
89	4704	12/15/90	D (NPR2)	25.6	-200
90	1736	09/03/81	D (NPR1)	21.4	-300
91	3806	08/31/90	U-CR	.	-300
92	4106	07/31/90	U-CR	.	-400
93	3817	08/28/90	U-CR	.	-1400

OBS	FOX_ID	DATE	SITE	AVGDIST	CE
1	3589	05/10/90	U-CR	.	3.0
2	3845	04/26/90	U-CR	.	2.8
3	3895	10/19/90	U-CR	.	2.7
4	3819	04/25/90	U-CR	.	2.6
5	3893	06/12/90	U-CR	.	2.4
6	1318	12/29/81	D (NPR1)	17.4	2.3
7	3810	08/02/90	U-CR	.	2.3
8	3727	10/12/90	U-CR	.	2.2
9	3806	08/31/90	U-CR	.	2.2
10	3884	11/29/90	U-CR	.	2.0
11	1326	01/06/82	D (NPR1)	21.9	1.8
12	1350	01/08/82	D (NPR1)	26.0	1.8
13	3399	10/05/90	U-CR	.	1.8
14	3590	05/09/90	U-CR	.	1.7
15	4616	12/05/90		.	1.7
16	3212	08/22/90	U-CR	.	1.6
17	1681	09/01/81	D (NPR1)	18.5	1.5
18	1771	11/04/81	U-ELK.	.	1.5
19	3684	08/23/90	D (NPR2)	50.7	1.5
20	3713	11/29/90		.	1.4
21	3818	04/25/90	U-CR	.	1.4
22	3859	08/03/90	U-CR	.	1.4
23	1304	12/29/81	U (NPR1)	3.4	1.3
24	1348#1	12/22/81	D (NPR1)	17.6	1.3
25	1731	09/03/81	D (NPR1)	21.5	1.3
26	1757	11/04/81	U-ELK.	.	1.3
27	1761	11/04/81	U-ELK.	.	1.3
28	3868	10/02/90	U-CR	.	1.3
29	3393	09/19/90	U-CR	.	1.2
30	3562	06/16/90	D (NPR2)	34.6	1.2
31	3808	08/08/90	U-CR	.	1.2
32	1309	11/19/81	D (NPR1)	19.3	1.1
33	1320	12/23/81	U (NPR1)	17.7	1.1
34	1419	11/19/81	D (NPR1)	25.3	1.1
35	3290	07/25/90	U (NPR1)	3.0	1.1
36	1324	09/02/81	D (NPR1)	21.9	1.0
37	1345	12/22/81	U (NPR1)	13.8	1.0
38	1425	12/23/81	D (NPR1)	16.2	1.0
39	2063	08/03/82	D (NPR1)	17.6	1.0
40	2065	08/03/82	D (NPR1)	17.6	1.0
41	3250	07/27/90	U (NPR1)	3.0	1.0
42	3883	08/01/90	U-CR	.	1.0
43	4654	12/07/90	D (NPR1)	17.9	1.0
44	4704	12/15/90	D (NPR2)	25.6	1.0
45	1644	08/25/81	U (NPR1)	13.7	0.9
46	1733	09/02/81	D (NPR1)	21.5	0.9
47	1745	09/01/81	U (NPR1)	13.7	0.9
48	1759	11/04/81	U-ELK.	.	0.9
49	4106	07/31/90	U-CR	.	0.9

OBS	FOX_ID	DATE	SITE	AVGDIST	CE
50	4306	08/01/90	U (NPR1)	4.5	0.9
51	4328	08/22/90	D (NPR2)	37.4	0.9
52	125	12/22/81	U (NPR1)	3.0	0.8
53	1408	12/23/81	D (NPR1)	21.4	0.8
54	1424	12/22/81	D (NPR1)	18.0	0.8
55	1725	09/01/81	D (NPR1)	20.5	0.8
56	1756	11/04/81	U-ELK.	.	0.8
57	1784	12/23/83	U (NPR1)	14.1	0.8
58	3612	04/26/90	U (NPR1)	.	0.8
59	3784#2	11/28/90	U (NPR1)	2.6	0.8
60	4343	12/15/90	D (NPR2)	27.7	0.8
61	4385#2	12/12/90	D (NPR2)	48.1	0.8
62	1348#2	08/03/82	D (NPR1)	17.6	0.7
63	1611	12/22/81	D (NPR1)	17.9	0.7
64	1758	11/04/81	U-ELK.	.	0.7
65	3700	12/12/90	D (NPR2)	41.8	0.7
66	4373#2	08/16/90	D (NPR1)	17.6	0.7
67	4380#2	12/18/90	U (NPR1)	6.1	0.7
68	4640	08/22/90	D (NPR2)	50.7	0.7
69	4703	12/13/90	D (NPR2)	26.6	0.7
70	1314	12/18/81	U (NPR1)	7.0	0.6
71	136	12/15/81	U (NPR1)	3.1	0.6
72	1423	12/23/81	D (NPR1)	16.2	0.6
73	3784#1	08/03/90	U (NPR1)	3.7	0.6
74	3792	08/24/90	D (NPR2)	28.9	0.6
75	3989	12/06/90	D (NPR1)	24.0	0.6
76	4073	05/09/90	U (NPR1)	27.3	0.6
77	4353	07/31/90	U (NPR1)	.	0.6
78	4373#1	05/09/90	D (NPR1)	17.6	0.6
79	1736	09/03/81	D (NPR1)	21.4	0.5
80	1776	12/15/81	U (NPR1)	5.7	0.5
81	3180	12/15/90	D (NPR2)	31.3	0.5
82	4313	07/25/90	U (NPR1)	12.3	0.5
83	4335	12/14/90		.	0.5
84	4663#2	12/11/90		.	0.5
85	4307	08/03/90		.	0.4
86	4682	08/16/90	D (NPR2)	26.0	0.4
87	4626	07/24/90	U (NPR1)	2.7	0.3
88	3817	08/28/90	U-CR	.	-0.3
89	4025	07/25/90	U (NPR1)	3.3	-0.3
90	4304	07/25/90	U (NPR1)	16.4	-0.3
91	4326	08/07/90		.	-0.3
92	4355	08/01/90	U (NPR1)	1.0	-0.3
93	4380#1	08/09/90	U (NPR1)	10.3	-0.3

OBS	FOX_ID	DATE	SITE	AVGDIST	CL
1	3212	08/22/90	U-CR	.	4790
2	3989	12/06/90	D (NPR1)	24.0	3350
3	3868	10/02/90	U-CR	.	2900
4	1348#1	12/22/81	D (NPR1)	17.6	2800
5	3727	10/12/90	U-CR	.	2710
6	3562	06/16/90	D (NPR2)	34.6	2700
7	1424	12/22/81	D (NPR1)	18.0	2490
8	3180	12/15/90	D (NPR2)	31.3	2460
9	3399	10/05/90	U-CR	.	2420
10	4335	12/14/90		.	2380
11	3684	08/23/90	D (NPR2)	50.7	2350
12	4704	12/15/90	D (NPR2)	25.6	2350
13	3808	08/08/90	U-CR	.	2340
14	4616	12/05/90		.	2230
15	3895	10/19/90	U-CR	.	2190
16	3784#2	11/28/90	U (NPR1)	2.6	2150
17	4654	12/07/90	D (NPR1)	17.9	2140
18	4385#2	12/12/90	D (NPR2)	48.1	2010
19	4682	08/16/90	D (NPR2)	26.0	1990
20	4663#2	12/11/90		.	1970
21	1423	12/23/81	D (NPR1)	16.2	1930
22	4703	12/13/90	D (NPR2)	26.6	1930
23	1419	11/19/81	D (NPR1)	25.3	1880
24	1758	11/04/81	U-ELK.	.	1880
25	1725	09/01/81	D (NPR1)	20.5	1860
26	1771	11/04/81	U-ELK.	.	1760
27	3250	07/27/90	U (NPR1)	3.0	1760
28	1611	12/22/81	D (NPR1)	17.9	1720
29	4343	12/15/90	D (NPR2)	27.7	1710
30	1757	11/04/81	U-ELK.	.	1670
31	1759	11/04/81	U-ELK.	.	1660
32	3700	12/12/90	D (NPR2)	41.8	1660
33	3713	11/29/90		.	1660
34	3792	08/24/90	D (NPR2)	28.9	1640
35	1408	12/23/81	D (NPR1)	21.4	1570
36	1745	09/01/81	U (NPR1)	13.7	1520
37	3290	07/25/90	U (NPR1)	3.0	1520
38	4373#1	05/09/90	D (NPR1)	17.6	1490
39	1756	11/04/81	U-ELK.	.	1430
40	3806	08/31/90	U-CR	.	1420
41	1761	11/04/81	U-ELK.	.	1410
42	1320	12/23/81	U (NPR1)	17.7	1400
43	4313	07/25/90	U (NPR1)	12.3	1380
44	3393	09/19/90	U-CR	.	1370
45	3590	05/09/90	U-CR	.	1300
46	1731	09/03/81	D (NPR1)	21.5	1290
47	1425	12/23/81	D (NPR1)	16.2	1280
48	4353	07/31/90	U (NPR1)	.	1250
49	3810	08/02/90	U-CR	.	1210

OBS	FOX_ID	DATE	SITE	AVGDIST	CL
50	1345	12/22/81	U (NPR1)	13.8	1200
51	136	12/15/81	U (NPR1)	3.1	1140
52	4380#2	12/18/90	U (NPR1)	6.1	1130
53	3819	04/25/90	U-CR	.	1120
54	4306	08/01/90	U (NPR1)	4.5	1120
55	4328	08/22/90	D (NPR2)	37.4	1100
56	1644	08/25/81	U (NPR1)	13.7	1090
57	4304	07/25/90	U (NPR1)	16.4	1090
58	1304	12/29/81	U (NPR1)	3.4	1060
59	1681	09/01/81	D (NPR1)	18.5	1050
60	4025	07/25/90	U (NPR1)	3.3	1050
61	1736	09/03/81	D (NPR1)	21.4	1040
62	1733	09/02/81	D (NPR1)	21.5	1020
63	4626	07/24/90	U (NPR1)	2.7	1020
64	3884	11/29/90	U-CR	.	1010
65	4307	08/03/90		.	977
66	2065	08/03/82	D (NPR1)	17.6	940
67	4073	05/09/90	U (NPR1)	27.3	915
68	3859	08/03/90	U-CR	.	884
69	1318	12/29/81	D (NPR1)	17.4	871
70	125	12/22/81	U (NPR1)	3.0	860
71	2063	08/03/82	D (NPR1)	17.6	857
72	1348#2	08/03/82	D (NPR1)	17.6	852
73	3817	08/28/90	U-CR	.	823
74	1784	12/23/83	U (NPR1)	14.1	813
75	4380#1	08/09/90	U (NPR1)	10.3	807
76	1314	12/18/81	U (NPR1)	7.0	782
77	4355	08/01/90	U (NPR1)	1.0	760
78	4373#2	08/16/90	D (NPR1)	17.6	726
79	4326	08/07/90		.	665
80	3784#1	08/03/90	U (NPR1)	3.7	634
81	1309	11/19/81	D (NPR1)	19.3	632
82	1776	12/15/81	U (NPR1)	5.7	583
83	4640	08/22/90	D (NPR2)	50.7	569
84	3589	05/10/90	U-CR	.	445
85	3612	04/26/90	U (NPR1)	.	430
86	3893	06/12/90	U-CR	.	330
87	1326	01/06/82	D (NPR1)	21.9	315
88	3845	04/26/90	U-CR	.	314
89	4106	07/31/90	U-CR	.	295
90	1350	01/08/82	D (NPR1)	26.0	278
91	1324	09/02/81	D (NPR1)	21.9	239
92	3818	04/25/90	U-CR	.	181
93	3883	08/01/90	U-CR	.	143

OBS	FOX_ID	DATE	SITE	AVGDIST	CO
1	4654	12/07/90	D (NPR1)	17.9	2.40
2	3250	07/27/90	U (NPR1)	3.0	1.23
3	3180	12/15/90	D (NPR2)	31.3	1.15
4	3817	08/28/90	U-CR	.	1.10
5	1424	12/22/81	D (NPR1)	18.0	1.00
6	1681	09/01/81	D (NPR1)	18.5	0.84
7	1318	12/29/81	D (NPR1)	17.4	0.82
8	3893	06/12/90	U-CR	.	0.76
9	4703	12/13/90	D (NPR2)	26.6	0.74
10	1348#2	08/03/82	D (NPR1)	17.6	0.71
11	4326	08/07/90		.	0.69
12	4616	12/05/90		.	0.65
13	3806	08/31/90	U-CR	.	0.63
14	3845	04/26/90	U-CR	.	0.61
15	2065	08/03/82	D (NPR1)	17.6	0.58
16	3784#2	11/28/90	U (NPR1)	2.6	0.58
17	1348#1	12/22/81	D (NPR1)	17.6	0.57
18	3989	12/06/90	D (NPR1)	24.0	0.56
19	4106	07/31/90	U-CR	.	0.55
20	4380#1	08/09/90	U (NPR1)	10.3	0.55
21	1736	09/03/81	D (NPR1)	21.4	0.54
22	1758	11/04/81	U-ELK.	.	0.54
23	1350	01/08/82	D (NPR1)	26.0	0.53
24	2063	08/03/82	D (NPR1)	17.6	0.53
25	3589	05/10/90	U-CR	.	0.52
26	3700	12/12/90	D (NPR2)	41.8	0.51
27	3399	10/05/90	U-CR	.	0.49
28	3868	10/02/90	U-CR	.	0.49
29	1745	09/01/81	U (NPR1)	13.7	0.47
30	3212	08/22/90	U-CR	.	0.47
31	3727	10/12/90	U-CR	.	0.47
32	3562	06/16/90	D (NPR2)	34.6	0.46
33	1326	01/06/82	D (NPR1)	21.9	0.41
34	3819	04/25/90	U-CR	.	0.41
35	4385#2	12/12/90	D (NPR2)	48.1	0.41
36	3883	08/01/90	U-CR	.	0.40
37	4328	08/22/90	D (NPR2)	37.4	0.40
38	4380#2	12/18/90	U (NPR1)	6.1	0.40
39	3612	04/26/90	U (NPR1)	.	0.38
40	3684	08/23/90	D (NPR2)	50.7	0.38
41	3792	08/24/90	D (NPR2)	28.9	0.37
42	3859	08/03/90	U-CR	.	0.37
43	3884	11/29/90	U-CR	.	0.37
44	3590	05/09/90	U-CR	.	0.36
45	136	12/15/81	U (NPR1)	3.1	0.35
46	4073	05/09/90	U (NPR1)	27.3	0.35
47	4304	07/25/90	U (NPR1)	16.4	0.35
48	4307	08/03/90		.	0.35
49	3895	10/19/90	U-CR	.	0.34

OBS	FOX_ID	DATE	SITE	AVGDIST	CO
50	4306	08/01/90	U (NPR1)	4.5	0.34
51	4313	07/25/90	U (NPR1)	12.3	0.34
52	1320	12/23/81	U (NPR1)	17.7	0.33
53	1425	12/23/81	D (NPR1)	16.2	0.32
54	3810	08/02/90	U-CR	.	0.31
55	3818	04/25/90	U-CR	.	0.31
56	1731	09/03/81	D (NPR1)	21.5	0.30
57	3393	09/19/90	U-CR	.	0.30
58	125	12/22/81	U (NPR1)	3.0	0.29
59	1419	11/19/81	D (NPR1)	25.3	0.29
60	1324	09/02/81	D (NPR1)	21.9	0.28
61	1757	11/04/81	U-ELK.	.	0.28
62	1771	11/04/81	U-ELK.	.	0.28
63	3713	11/29/90		.	0.28
64	3808	08/08/90	U-CR	.	0.28
65	1759	11/04/81	U-ELK.	.	0.27
66	1304	12/29/81	U (NPR1)	3.4	0.26
67	1309	11/19/81	D (NPR1)	19.3	0.26
68	1314	12/18/81	U (NPR1)	7.0	0.26
69	1761	11/04/81	U-ELK.	.	0.26
70	3784#1	08/03/90	U (NPR1)	3.7	0.26
71	1784	12/23/83	U (NPR1)	14.1	0.25
72	4343	12/15/90	D (NPR2)	27.7	0.25
73	4640	08/22/90	D (NPR2)	50.7	0.25
74	1611	12/22/81	D (NPR1)	17.9	0.24
75	1733	09/02/81	D (NPR1)	21.5	0.24
76	4025	07/25/90	U (NPR1)	3.3	0.24
77	1345	12/22/81	U (NPR1)	13.8	0.23
78	4373#1	05/09/90	D (NPR1)	17.6	0.23
79	1408	12/23/81	D (NPR1)	21.4	0.22
80	4704	12/15/90	D (NPR2)	25.6	0.22
81	3290	07/25/90	U (NPR1)	3.0	0.21
82	4682	08/16/90	D (NPR2)	26.0	0.21
83	4353	07/31/90	U (NPR1)	.	0.20
84	4626	07/24/90	U (NPR1)	2.7	0.20
85	1756	11/04/81	U-ELK.	.	0.19
86	4373#2	08/16/90	D (NPR1)	17.6	0.19
87	4663#2	12/11/90		.	0.19
88	1423	12/23/81	D (NPR1)	16.2	0.18
89	1644	08/25/81	U (NPR1)	13.7	0.18
90	4355	08/01/90	U (NPR1,	1.0	0.18
91	1725	09/01/81	D (NPR1)	20.5	0.17
92	1776	12/15/81	U (NPR1)	5.7	0.15
93	4335	12/14/90		.	0.14

OBS	FOX_ID	DATE	SITE	AVGDIST	CR
1	3562	06/16/90	D (NPR2)	34.6	7.7
2	3589	05/10/90	U-CR	.	5.8
3	3806	08/31/90	U-CR	.	5.7
4	3727	10/12/90	U-CR	.	5.3
5	3845	04/26/90	U-CR	.	5.2
6	4704	12/15/90	D (NPR2)	25.6	4.5
7	3590	05/09/90	U-CR	.	4.2
8	3212	08/22/90	U-CR	.	4.1
9	1320	12/23/81	U (NPR1)	17.7	3.9
10	1318	12/29/81	D (NPR1)	17.4	3.7
11	4328	08/22/90	D (NPR2)	37.4	3.7
12	1324	09/02/81	D (NPR1)	21.9	3.5
13	3399	10/05/90	U-CR	.	3.4
14	3859	08/03/90	U-CR	.	3.4
15	3393	09/19/90	U-CR	.	3.3
16	3895	10/19/90	U-CR	.	3.1
17	3868	10/02/90	U-CR	.	3.0
18	3713	11/29/90		.	2.9
19	3819	04/25/90	U-CR	.	2.9
20	3893	06/12/90	U-CR	.	2.9
21	1757	11/04/81	U-ELK.	.	2.8
22	3817	08/28/90	U-CR	.	2.8
23	1350	01/08/82	D (NPR1)	26.0	2.6
24	1756	11/04/81	U-ELK.	.	2.5
25	1731	09/03/81	D (NPR1)	21.5	2.4
26	3290	07/25/90	U (NPR1)	3.0	2.3
27	3808	08/08/90	U-CR	.	2.3
28	1326	01/06/82	D (NPR1)	21.9	2.2
29	1761	11/04/81	U-ELK.	.	2.2
30	1681	09/01/81	D (NPR1)	18.5	2.0
31	4654	12/07/90	D (NPR1)	17.9	1.9
32	1348#1	12/22/81	D (NPR1)	17.6	1.8
33	1758	11/04/81	U-ELK.	.	1.8
34	1759	11/04/81	U-ELK.	.	1.8
35	1771	11/04/81	U-ELK.	.	1.8
36	4106	07/31/90	U-CR	.	1.8
37	4682	08/16/90	D (NPR2)	26.0	1.8
38	1304	12/29/81	U (NPR1)	3.4	1.7
39	3810	08/02/90	U-CR	.	1.6
40	3884	11/29/90	U-CR	.	1.6
41	4385#2	12/12/90	D (NPR2)	48.1	1.6
42	4616	12/05/90		.	1.6
43	1345	12/22/81	U (NPR1)	13.8	1.5
44	1419	11/19/81	D (NPR1)	25.3	1.5
45	1425	12/23/81	D (NPR1)	16.2	1.5
46	1784	12/23/83	U (NPR1)	14.1	1.5
47	2065	08/03/82	D (NPR1)	17.6	1.5
48	3684	08/23/90	D (NPR2)	50.7	1.5
49	3818	04/25/90	U-CR	.	1.5

OBS	FOX_ID	DATE	SITE	AVGDIST	CR
50	4343	12/15/90	D (NPR2)	27.7	1.5
51	1309	11/19/81	D (NPR1)	19.3	1.4
52	1424	12/22/81	D (NPR1)	18.0	1.4
53	2063	08/03/82	D (NPR1)	17.6	1.4
54	3700	12/12/90	D (NPR2)	41.8	1.4
55	3883	08/01/90	U-CR	.	1.3
56	125	12/22/81	U (NPR1)	3.0	1.2
57	4335	12/14/90		.	1.2
58	1408	12/23/81	D (NPR1)	21.4	1.1
59	1733	09/02/81	D (NPR1)	21.5	1.1
60	3250	07/27/90	U (NPR1)	3.0	1.1
61	4073	05/09/90	U (NPR1)	27.3	1.1
62	1314	12/18/81	U (NPR1)	7.0	1.0
63	1725	09/01/81	D (NPR1)	20.5	0.9
64	3180	12/15/90	D (NPR2)	31.3	0.9
65	3784#2	11/28/90	U (NPR1)	2.6	0.9
66	4355	08/01/90	U (NPR1)	1.0	0.9
67	4373#1	05/09/90	D (NPR1)	17.6	0.9
68	4373#2	08/16/90	D (NPR1)	17.6	0.9
69	4626	07/24/90	U (NPR1)	2.7	0.9
70	4703	12/13/90	D (NPR2)	26.6	0.9
71	1423	12/23/81	D (NPR1)	16.2	0.8
72	1611	12/22/81	D (NPR1)	17.9	0.8
73	1736	09/03/81	D (NPR1)	21.4	0.8
74	4380#1	08/09/90	U (NPR1)	10.3	0.8
75	4640	08/22/90	D (NPR2)	50.7	0.8
76	136	12/15/81	U (NPR1)	3.1	0.7
77	1745	09/01/81	U (NPR1)	13.7	0.7
78	1776	12/15/81	U (NPR1)	5.7	0.7
79	3784#1	08/03/90	U (NPR1)	3.7	0.7
80	3792	08/24/90	D (NPR2)	28.9	0.7
81	4380#2	12/18/90	U (NPR1)	6.1	0.7
82	1348#2	08/03/82	D (NPR1)	17.6	0.6
83	1644	08/25/81	U (NPR1)	13.7	0.6
84	4307	08/03/90		.	0.6
85	3612	04/26/90	U (NPR1)	.	0.5
86	3989	12/06/90	D (NPR1)	24.0	0.5
87	4313	07/25/90	U (NPR1)	12.3	0.5
88	4663#2	12/11/90		.	0.5
89	4306	08/01/90	U (NPR1)	4.5	0.4
90	4025	07/25/90	U (NPR1)	3.3	-0.1
91	4304	07/25/90	U (NPR1)	16.4	-0.1
92	4326	08/07/90		.	-0.1
93	4353	07/31/90	U (NPR1)	.	-0.1

OBS	FOX_ID	DATE	SITE	AVGDIST	CS
1	3590	05/09/90	U-CR	.	0.22
2	1745	09/01/81	U (NPR1)	13.7	0.17
3	3845	04/26/90	U-CR	.	0.16
4	1318	12/29/81	D (NPR1)	17.4	0.15
5	3589	05/10/90	U-CR	.	0.15
6	3893	06/12/90	U-CR	.	0.15
7	3895	10/19/90	U-CR	.	0.15
8	3806	08/31/90	U-CR	.	0.14
9	3819	04/25/90	U-CR	.	0.14
10	1348#2	08/03/82	D (NPR1)	17.6	0.13
11	3727	10/12/90	U-CR	.	0.13
12	3883	08/01/90	U-CR	.	0.13
13	3884	11/29/90	U-CR	.	0.13
14	1761	11/04/81	U-ELK.	.	0.11
15	1771	11/04/81	U-ELK.	.	0.11
16	3810	08/02/90	U-CR	.	0.11
17	1350	01/08/82	D (NPR1)	26.0	0.10
18	1424	12/22/81	D (NPR1)	18.0	0.10
19	1757	11/04/81	U-ELK.	.	0.10
20	3393	09/19/90	U-CR	.	0.10
21	3713	11/29/90		.	0.10
22	4380#2	12/18/90	U (NPR1)	6.1	0.10
23	1348#1	12/22/81	D (NPR1)	17.6	0.09
24	1425	12/23/81	D (NPR1)	16.2	0.09
25	1611	12/22/81	D (NPR1)	17.9	0.09
26	1681	09/01/81	D (NPR1)	18.5	0.09
27	3399	10/05/90	U-CR	.	0.09
28	1731	09/03/81	D (NPR1)	21.5	0.08
29	1733	09/02/81	D (NPR1)	21.5	0.08
30	1756	11/04/81	U-ELK.	.	0.08
31	1758	11/04/81	U-ELK.	.	0.08
32	1759	11/04/81	U-ELK.	.	0.08
33	3212	08/22/90	U-CR	.	0.08
34	3562	06/16/90	D (NPR2)	34.6	0.08
35	3818	04/25/90	U-CR	.	0.08
36	3859	08/03/90	U-CR	.	0.08
37	3868	10/02/90	U-CR	.	0.08
38	4328	08/22/90	D (NPR2)	37.4	0.08
39	4654	12/07/90	D (NPR1)	17.9	0.08
40	1304	12/29/81	U (NPR1)	3.4	0.07
41	1320	12/23/81	U (NPR1)	17.7	0.07
42	1326	01/06/82	D (NPR1)	21.9	0.07
43	1419	11/19/81	D (NPR1)	25.3	0.07
44	1736	09/03/81	D (NPR1)	21.4	0.07
45	3250	07/27/90	U (NPR1)	3.0	0.07
46	3684	08/23/90	D (NPR2)	50.7	0.07
47	3808	08/08/90	U-CR	.	0.07
48	4073	05/09/90	U (NPR1)	27.3	0.07
49	4385#2	12/12/90	D (NPR2)	48.1	0.07

OBS	FOX_ID	DATE	SITE	AVGDIST	CS
50	4704	12/15/90	D (NPR2)	25.6	0.07
51	1309	11/19/81	D (NPR1)	19.3	0.06
52	4025	07/25/90	U (NPR1)	3.3	0.06
53	125	12/22/81	U (NPR1)	3.0	0.05
54	1324	09/02/81	D (NPR1)	21.9	0.05
55	1725	09/01/81	D (NPR1)	20.5	0.05
56	3784#1	08/03/90	U (NPR1)	3.7	0.05
57	4307	08/03/90		.	0.05
58	1776	12/15/81	U (NPR1)	5.7	0.04
59	1345	12/22/81	U (NPR1)	13.8	0.03
60	1314	12/18/81	U (NPR1)	7.0	-0.02
61	136	12/15/81	U (NPR1)	3.1	-0.02
62	1408	12/23/81	D (NPR1)	21.4	-0.02
63	1784	12/23/83	U (NPR1)	14.1	-0.02
64	1423	12/23/81	D (NPR1)	16.2	-0.05
65	1644	08/25/81	U (NPR1)	13.7	-0.05
66	2063	08/03/82	D (NPR1)	17.6	-0.05
67	2065	08/03/82	D (NPR1)	17.6	-0.05
68	3180	12/15/90	D (NPR2)	31.3	-0.05
69	3290	07/25/90	U (NPR1)	3.0	-0.05
70	3612	04/26/90	U (NPR1)	.	-0.05
71	3700	12/12/90	D (NPR2)	41.8	-0.05
72	3784#2	11/28/90	U (NPR1)	2.6	-0.05
73	3792	08/24/90	D (NPR2)	28.9	-0.05
74	3989	12/06/90	D (NPR1)	24.0	-0.05
75	4106	07/31/90	U-CR	.	-0.05
76	4304	07/25/90	U (NPR1)	16.4	-0.05
77	4306	08/01/90	U (NPR1)	4.5	-0.05
78	4313	07/25/90	U (NPR1)	12.3	-0.05
79	4326	08/07/90		.	-0.05
80	4335	12/14/90		.	-0.05
81	4343	12/15/90	D (NPR2)	27.7	-0.05
82	4353	07/31/90	U (NPR1)	.	-0.05
83	4355	08/01/90	U (NPR1)	1.0	-0.05
84	4373#1	05/09/90	D (NPR1)	17.6	-0.05
85	4373#2	08/16/90	D (NPR1)	17.6	-0.05
86	4380#1	08/09/90	U (NPR1)	10.3	-0.05
87	4616	12/05/90		.	-0.05
88	4626	07/24/90	U (NPR1)	2.7	-0.05
89	4640	08/22/90	D (NPR2)	50.7	-0.05
90	4663#2	12/11/90		.	-0.05
91	4682	08/16/90	D (NPR2)	26.0	-0.05
92	4703	12/13/90	D (NPR2)	26.6	-0.05
93	3817	08/28/90	U-CR	.	-0.06

OBS	FOX_ID	DATE	SITE	AVGDIST	CU
1	3612	04/26/90	U (NPR1)	.	54.0
2	3590	05/09/90	U-CR	.	48.0
3	4355	08/01/90	U (NPR1)	1.0	43.0
4	3895	10/19/90	U-CR	.	36.0
5	4304	07/25/90	U (NPR1)	16.4	36.0
6	3806	08/31/90	U-CR	.	35.0
7	3893	06/12/90	U-CR	.	32.0
8	1736	09/03/81	D (NPR1)	21.4	31.0
9	1681	09/01/81	D (NPR1)	18.5	30.0
10	3819	04/25/90	U-CR	.	30.0
11	4313	07/25/90	U (NPR1)	12.3	30.0
12	3399	10/05/90	U-CR	.	29.0
13	3884	11/29/90	U-CR	.	28.0
14	4106	07/31/90	U-CR	.	27.0
15	4373#2	08/16/90	D (NPR1)	17.6	27.0
16	3883	08/01/90	U-CR	.	26.0
17	4373#1	05/09/90	D (NPR1)	17.6	26.0
18	4380#1	08/09/90	U (NPR1)	10.3	26.0
19	4626	07/24/90	U (NPR1)	2.7	26.0
20	1350	01/08/82	D (NPR1)	26.0	25.0
21	1731	09/03/81	D (NPR1)	21.5	25.0
22	3589	05/10/90	U-CR	.	25.0
23	3859	08/03/90	U-CR	.	25.0
24	1326	01/06/82	D (NPR1)	21.9	24.4
25	1318	12/29/81	D (NPR1)	17.4	24.0
26	3868	10/02/90	U-CR	.	24.0
27	1309	11/19/81	D (NPR1)	19.3	23.0
28	3810	08/02/90	U-CR	.	23.0
29	3818	04/25/90	U-CR	.	23.0
30	3845	04/26/90	U-CR	.	23.0
31	4326	08/07/90		.	23.0
32	4328	08/22/90	D (NPR2)	37.4	23.0
33	3684	08/23/90	D (NPR2)	50.7	22.0
34	3792	08/24/90	D (NPR2)	28.9	22.0
35	1320	12/23/81	U (NPR1)	17.7	21.4
36	3393	09/19/90	U-CR	.	21.0
37	4073	05/09/90	U (NPR1)	27.3	21.0
38	4616	12/05/90		.	21.0
39	4640	08/22/90	D (NPR2)	50.7	21.0
40	1756	11/04/81	U-ELK.	.	20.0
41	1757	11/04/81	U-ELK.	.	20.0
42	2063	08/03/82	D (NPR1)	17.6	20.0
43	3290	07/25/90	U (NPR1)	3.0	20.0
44	3700	12/12/90	D (NPR2)	41.8	20.0
45	3727	10/12/90	U-CR	.	20.0
46	3784#1	08/03/90	U (NPR1)	3.7	20.0
47	3808	08/08/90	U-CR	.	20.0
48	4307	08/03/90		.	20.0
49	4353	07/31/90	U (NPR1)	.	20.0

OBS	FOX_ID	DATE	SITE	AVGDIST	CU
50	4682	08/16/90	D (NPR2)	26.0	20.0
51	4704	12/15/90	D (NPR2)	25.6	20.0
52	1304	12/29/81	U (NPR1)	3.4	18.0
53	1348#1	12/22/81	D (NPR1)	17.6	18.0
54	1424	12/22/81	D (NPR1)	18.0	18.000
55	1758	11/04/81	U-ELK.	.	18.000
56	1761	11/04/81	U-ELK.	.	18.000
57	3250	07/27/90	U (NPR1)	3.0	18.000
58	1324	09/02/81	D (NPR1)	21.9	17.600
59	1425	12/23/81	D (NPR1)	16.2	17.000
60	3562	06/16/90	D (NPR2)	34.6	17.000
61	3713	11/29/90		.	17.000
62	1314	12/18/81	U (NPR1)	7.0	16.900
63	136	12/15/81	U (NPR1)	3.1	16.300
64	1644	08/25/81	U (NPR1)	13.7	16.000
65	1725	09/01/81	D (NPR1)	20.5	16.000
66	1759	11/04/81	U-ELK.	.	16.000
67	1771	11/04/81	U-ELK.	.	16.000
68	2065	08/03/82	D (NPR1)	17.6	16.000
69	4306	08/01/90	U (NPR1)	4.5	16.000
70	4380#2	12/18/90	U (NPR1)	6.1	16.000
71	4654	12/07/90	D (NPR1)	17.9	16.000
72	4663#2	12/11/90		.	16.000
73	1345	12/22/81	U (NPR1)	13.8	15.100
74	1733	09/02/81	D (NPR1)	21.5	15.000
75	1745	09/01/81	U (NPR1)	13.7	15.000
76	3180	12/15/90	D (NPR2)	31.3	15.000
77	3212	08/22/90	U-CR	.	15.000
78	4343	12/15/90	D (NPR2)	27.7	15.000
79	1408	12/23/81	D (NPR1)	21.4	14.600
80	1419	11/19/81	D (NPR1)	25.3	14.000
81	1611	12/22/81	D (NPR1)	17.9	14.000
82	4025	07/25/90	U (NPR1)	3.3	14.000
83	4703	12/13/90	D (NPR2)	26.6	14.000
84	1784	12/23/83	U (NPR1)	14.1	13.600
85	1423	12/23/81	D (NPR1)	16.2	13.000
86	4335	12/14/90		.	12.000
87	3784#2	11/28/90	U (NPR1)	2.6	11.000
88	4385#2	12/12/90	D (NPR2)	48.1	11.000
89	1776	12/15/81	U (NPR1)	5.7	10.200
90	3989	12/06/90	D (NPR1)	24.0	9.400
91	125	12/22/81	U (NPR1)	3.0	6.200
92	1348#2	08/03/82	D (NPR1)	17.6	0.015
93	3817	08/28/90	U-CR	.	-15.000

OBS	FOX_ID	DATE	SITE	AVGDIST	DY
1	1318	12/29/81	D (NPR1)	17.4	0.5
2	3589	05/10/90	U-CR	.	0.4
3	3845	04/26/90	U-CR	.	0.4
4	1350	01/08/82	D (NPR1)	26.0	0.3
5	1419	11/19/81	D (NPR1)	25.3	0.3
6	1424	12/22/81	D (NPR1)	18.0	0.3
7	1681	09/01/81	D (NPR1)	18.5	0.3
8	1731	09/03/81	D (NPR1)	21.5	0.3
9	1757	11/04/81	U-ELK.	.	0.3
10	1771	11/04/81	U-ELK.	.	0.3
11	3399	10/05/90	U-CR	.	0.3
12	3713	11/29/90		.	0.3
13	3727	10/12/90	U-CR	.	0.3
14	3806	08/31/90	U-CR	.	0.3
15	3810	08/02/90	U-CR	.	0.3
16	3819	04/25/90	U-CR	.	0.3
17	3893	06/12/90	U-CR	.	0.3
18	3895	10/19/90	U-CR	.	0.3
19	1304	12/29/81	U (NPR1)	3.4	0.2
20	1309	11/19/81	D (NPR1)	19.3	0.2
21	1348#1	12/22/81	D (NPR1)	17.6	0.2
22	1425	12/23/81	D (NPR1)	16.2	0.2
23	1644	08/25/81	U (NPR1)	13.7	0.2
24	1733	09/02/81	D (NPR1)	21.5	0.2
25	1756	11/04/81	U-ELK.	.	0.2
26	1758	11/04/81	U-ELK.	.	0.2
27	1759	11/04/81	U-ELK.	.	0.2
28	1761	11/04/81	U-ELK.	.	0.2
29	3212	08/22/90	U-CR	.	0.2
30	3250	07/27/90	U (NPR1)	3.0	0.2
31	3290	07/25/90	U (NPR1)	3.0	0.2
32	3393	09/19/90	U-CR	.	0.2
33	3562	06/16/90	D (NPR2)	34.6	0.2
34	3590	05/09/90	U-CR	.	0.2
35	3612	04/26/90	U (NPR1)	.	0.2
36	3684	08/23/90	D (NPR2)	50.7	0.2
37	3784#2	11/28/90	U (NPR1)	2.6	0.2
38	3817	08/28/90	U-CR	.	0.2
39	3818	04/25/90	U-CR	.	0.2
40	3859	08/03/90	U-CR	.	0.2
41	3868	10/02/90	U-CR	.	0.2
42	3884	11/29/90	U-CR	.	0.2
43	4328	08/22/90	D (NPR2)	37.4	0.2
44	4385#2	12/12/90	D (NPR2)	48.1	0.2
45	4616	12/05/90		.	0.2
46	1423	12/23/81	D (NPR1)	16.2	0.1
47	1611	12/22/81	D (NPR1)	17.9	0.1
48	3180	12/15/90	D (NPR2)	31.3	0.1
49	3784#1	08/03/90	U (NPR1)	3.7	0.1

OBS	FOX_ID	DATE	SITE	AVGDIST	DY
50	3808	08/08/90	U-CR	.	0.1
51	3989	12/06/90	D (NPR1)	24.0	0.1
52	4313	07/25/90	U (NPR1)	12.3	0.1
53	4343	12/15/90	D (NPR2)	27.7	0.1
54	4373#2	08/16/90	D (NPR1)	17.6	0.1
55	4626	07/24/90	U (NPR1)	2.7	0.1
56	4704	12/15/90	D (NPR2)	25.6	0.1
57	1348#2	08/03/82	D (NPR1)	17.6	-0.1
58	1725	09/01/81	D (NPR1)	20.5	-0.1
59	1736	09/03/81	D (NPR1)	21.4	-0.1
60	1745	09/01/81	U (NPR1)	13.7	-0.1
61	2063	08/03/82	D (NPR1)	17.6	-0.1
62	2065	08/03/82	D (NPR1)	17.6	-0.1
63	3700	12/12/90	D (NPR2)	41.8	-0.1
64	3792	08/24/90	D (NPR2)	28.9	-0.1
65	3883	08/01/90	U-CR	.	-0.1
66	4025	07/25/90	U (NPR1)	3.3	-0.1
67	4073	05/09/90	U (NPR1)	27.3	-0.1
68	4106	07/31/90	U-CR	.	-0.1
69	4304	07/25/90	U (NPR1)	16.4	-0.1
70	4306	08/01/90	U (NPR1)	4.5	-0.1
71	4307	08/03/90		.	-0.1
72	4326	08/07/90		.	-0.1
73	4335	12/14/90		.	-0.1
74	4353	07/31/90	U (NPR1)	.	-0.1
75	4355	08/01/90	U (NPR1)	1.0	-0.1
76	4373#1	05/09/90	D (NPR1)	17.6	-0.1
77	4380#1	08/09/90	U (NPR1)	10.3	-0.1
78	4380#2	12/18/90	U (NPR1)	6.1	-0.1
79	4640	08/22/90	D (NPR2)	50.7	-0.1
80	4654	12/07/90	D (NPR1)	17.9	-0.1
81	4663#2	12/11/90		.	-0.1
82	4682	08/16/90	D (NPR2)	26.0	-0.1
83	4703	12/13/90	D (NPR2)	26.6	-0.1
84	125	12/22/81	U (NPR1)	3.0	.
85	1314	12/18/81	U (NPR1)	7.0	.
86	1320	12/23/81	U (NPR1)	17.7	.
87	1324	09/02/81	D (NPR1)	21.9	.
88	1326	01/06/82	D (NPR1)	21.9	.
89	1345	12/22/81	U (NPR1)	13.8	.
90	136	12/15/81	U (NPR1)	3.1	.
91	1408	12/23/81	D (NPR1)	21.4	.
92	1776	12/15/81	U (NPR1)	5.7	.
93	1784	12/23/83	U (NPR1)	14.1	.

OBS	FOX_ID	DATE	SITE	AVGDIST	EU
1	3589	05/10/90	U-CR	.	0.05
2	3806	08/31/90	U-CR	.	0.05
3	3727	10/12/90	U-CR	.	0.04
4	3810	08/02/90	U-CR	.	0.04
5	3818	04/25/90	U-CR	.	0.04
6	3819	04/25/90	U-CR	.	0.04
7	3845	04/26/90	U-CR	.	0.04
8	3893	06/12/90	U-CR	.	0.04
9	3895	10/19/90	U-CR	.	0.04
10	1304	12/29/81	U (NPR1)	3.4	0.03
11	1318	12/29/81	D (NPR1)	17.4	0.03
12	1348#1	12/22/81	D (NPR1)	17.6	0.03
13	1348#2	08/03/82	D (NPR1)	17.6	0.03
14	1350	01/08/82	D (NPR1)	26.0	0.03
15	1681	09/01/81	D (NPR1)	18.5	0.03
16	1733	09/02/81	D (NPR1)	21.5	0.03
17	3212	08/22/90	U-CR	.	0.03
18	3399	10/05/90	U-CR	.	0.03
19	3590	05/09/90	U-CR	.	0.03
20	3883	08/01/90	U-CR	.	0.03
21	3884	11/29/90	U-CR	.	0.03
22	4640	08/22/90	D (NPR2)	50.7	0.03
23	4704	12/15/90	D (NPR2)	25.6	0.03
24	1309	11/19/81	D (NPR1)	19.3	0.02
25	1320	12/23/81	U (NPR1)	17.7	0.02
26	1324	09/02/81	D (NPR1)	21.9	0.02
27	1326	01/06/82	D (NPR1)	21.9	0.02
28	1345	12/22/81	U (NPR1)	13.8	0.02
29	1419	11/19/81	D (NPR1)	25.3	0.02
30	1424	12/22/81	D (NPR1)	18.0	0.02
31	1425	12/23/81	D (NPR1)	16.2	0.02
32	1644	08/25/81	U (NPR1)	13.7	0.02
33	1725	09/01/81	D (NPR1)	20.5	0.02
34	1731	09/03/81	D (NPR1)	21.5	0.02
35	1756	11/04/81	U-ELK.	.	0.02
36	1757	11/04/81	U-ELK.	.	0.02
37	1759	11/04/81	U-ELK.	.	0.02
38	1761	11/04/81	U-ELK.	.	0.02
39	1771	11/04/81	U-ELK.	.	0.02
40	3250	07/27/90	U (NPR1)	3.0	0.02
41	3290	07/25/90	U (NPR1)	3.0	0.02
42	3393	09/19/90	U-CR	.	0.02
43	3684	08/23/90	D (NPR2)	50.7	0.02
44	3713	11/29/90		.	0.02
45	3784#1	08/03/90	U (NPR1)	3.7	0.02
46	3808	08/08/90	U-CR	.	0.02
47	3859	08/03/90	U-CR	.	0.02
48	3868	10/02/90	U-CR	.	0.02
49	4328	08/22/90	D (NPR2)	37.4	0.02

OBS	FOX_ID	DATE	SITE	AVGDIST	EU
50	4616	12/05/90		.	0.02
51	4654	12/07/90	D (NPR1)	17.9	0.02
52	125	12/22/81	U (NPR1)	3.0	0.01
53	1314	12/18/81	U (NPR1)	7.0	0.01
54	136	12/15/81	U (NPR1)	3.1	0.01
55	1408	12/23/81	D (NPR1)	21.4	0.01
56	1423	12/23/81	D (NPR1)	16.2	0.01
57	1611	12/22/81	D (NPR1)	17.9	0.01
58	1784	12/23/83	U (NPR1)	14.1	0.01
59	2063	08/03/82	D (NPR1)	17.6	0.01
60	3612	04/26/90	U (NPR1)	.	0.01
61	3784#2	11/28/90	U (NPR1)	2.6	0.01
62	3792	08/24/90	D (NPR2)	28.9	0.01
63	3989	12/06/90	D (NPR1)	24.0	0.01
64	4025	07/25/90	U (NPR1)	3.3	0.01
65	4307	08/03/90		.	0.01
66	4335	12/14/90		.	0.01
67	4373#2	08/16/90	D (NPR1)	17.6	0.01
68	4380#2	12/18/90	U (NPR1)	6.1	0.01
69	1736	09/03/81	D (NPR1)	21.4	-0.01
70	1745	09/01/81	U (NPR1)	13.7	-0.01
71	1758	11/04/81	U-ELK.	.	-0.01
72	1776	12/15/81	U (NPR1)	5.7	-0.01
73	2065	08/03/82	D (NPR1)	17.6	-0.01
74	3180	12/15/90	D (NPR2)	31.3	-0.01
75	3562	06/16/90	D (NPR2)	34.6	-0.01
76	3700	12/12/90	D (NPR2)	41.8	-0.01
77	3817	08/28/90	U-CR	.	-0.01
78	4073	05/09/90	U (NPR1)	27.3	-0.01
79	4106	07/31/90	U-CR	.	-0.01
80	4304	07/25/90	U (NPR1)	16.4	-0.01
81	4306	08/01/90	U (NPR1)	4.5	-0.01
82	4313	07/25/90	U (NPR1)	12.3	-0.01
83	4326	08/07/90		.	-0.01
84	4343	12/15/90	D (NPR2)	27.7	-0.01
85	4353	07/31/90	U (NPR1)	.	-0.01
86	4355	08/01/90	U (NPR1)	1.0	-0.01
87	4373#1	05/09/90	D (NPR1)	17.6	-0.01
88	4380#1	08/09/90	U (NPR1)	10.3	-0.01
89	4385#2	12/12/90	D (NPR2)	48.1	-0.01
90	4626	07/24/90	U (NPR1)	2.7	-0.01
91	4663#2	12/11/90		.	-0.01
92	4682	08/16/90	D (NPR2)	26.0	-0.01
93	4703	12/13/90	D (NPR2)	26.6	-0.01

OBS	FOX_ID	DATE	SITE	AVGDIST	FE
1	4616	12/05/90		.	5500
2	4385#2	12/12/90	D (NPR2)	48.1	4150
3	3700	12/12/90	D (NPR2)	41.8	3610
4	4328	08/22/90	D (NPR2)	37.4	2060
5	3817	08/28/90	U-CR	.	1730
6	3684	08/23/90	D (NPR2)	50.7	1680
7	4343	12/15/90	D (NPR2)	27.7	1600
8	3589	05/10/90	U-CR	.	1454
9	3845	04/26/90	U-CR	.	1450
10	3792	08/24/90	D (NPR2)	28.9	1440
11	1776	12/15/81	U (NPR1)	5.7	1430
12	4704	12/15/90	D (NPR2)	25.6	1430
13	1318	12/29/81	D (NPR1)	17.4	1400
14	3806	08/31/90	U-CR	.	1300
15	1350	01/08/82	D (NPR1)	26.0	1290
16	3212	08/22/90	U-CR	.	1210
17	3893	06/12/90	U-CR	.	1192
18	1757	11/04/81	U-ELK.	.	1070
19	3727	10/12/90	U-CR	.	1060
20	3819	04/25/90	U-CR	.	1040
21	3895	10/19/90	U-CR	.	992
22	3562	06/16/90	D (NPR2)	34.6	963
23	1731	09/03/81	D (NPR1)	21.5	951
24	1348#1	12/22/81	D (NPR1)	17.6	939
25	1681	09/01/81	D (NPR1)	18.5	916
26	3590	05/09/90	U-CR	.	888
27	3399	10/05/90	U-CR	.	879
28	1324	09/02/81	D (NPR1)	21.9	853
29	1408	12/23/81	D (NPR1)	21.4	840
30	1771	11/04/81	U-ELK.	.	801
31	3810	08/02/90	U-CR	.	800
32	1345	12/22/81	U (NPR1)	13.8	780
33	4106	07/31/90	U-CR	.	775
34	3713	11/29/90		.	774
35	3884	11/29/90	U-CR	.	771
36	1326	01/06/82	D (NPR1)	21.9	770
37	1761	11/04/81	U-ELK.	.	764
38	2065	08/03/82	D (NPR1)	17.6	753
39	1309	11/19/81	D (NPR1)	19.3	751
40	1736	09/03/81	D (NPR1)	21.4	734
41	3859	08/03/90	U-CR	.	722
42	3393	09/19/90	U-CR	.	684
43	1425	12/23/81	D (NPR1)	16.2	667
44	1304	12/29/81	U (NPR1)	3.4	639
45	1419	11/19/81	D (NPR1)	25.3	638
46	1424	12/22/81	D (NPR1)	18.0	636
47	3883	08/01/90	U-CR	.	635
48	3868	10/02/90	U-CR	.	633
49	1756	11/04/81	U-ELK.	.	631

OBS	FOX_ID	DATE	SITE	AVGDIST	FE
50	1320	12/23/81	U (NPR1)	17.7	626
51	1759	11/04/81	U-ELK.	.	616
52	1758	11/04/81	U-ELK.	.	604
53	1733	09/02/81	D (NPR1)	21.5	588
54	1745	09/01/81	U (NPR1)	13.7	581
55	3808	08/08/90	U-CR	.	560
56	4073	05/09/90	U (NPR1)	27.3	555
57	3784#2	11/28/90	U (NPR1)	2.6	523
58	3818	04/25/90	U-CR	.	515
59	1348#2	08/03/82	D (NPR1)	17.6	489
60	3250	07/27/90	U (NPR1)	3.0	452
61	4326	08/07/90		.	450
62	4373#1	05/09/90	D (NPR1)	17.6	448
63	2063	08/03/82	D (NPR1)	17.6	446
64	1725	09/01/81	D (NPR1)	20.5	430
65	4335	12/14/90		.	426
66	1611	12/22/81	D (NPR1)	17.9	425
67	4373#2	08/16/90	D (NPR1)	17.6	417
68	4654	12/07/90	D (NPR1)	17.9	409
69	3989	12/06/90	D (NPR1)	24.0	398
70	125	12/22/81	U (NPR1)	3.0	381
71	1644	08/25/81	U (NPR1)	13.7	370
72	1423	12/23/81	D (NPR1)	16.2	334
73	4355	08/01/90	U (NPR1)	1.0	333
74	4353	07/31/90	U (NPR1)	.	325
75	4703	12/13/90	D (NPR2)	26.6	320
76	3180	12/15/90	D (NPR2)	31.3	309
77	3612	04/26/90	U (NPR1)	.	307
78	4313	07/25/90	U (NPR1)	12.3	300
79	3290	07/25/90	U (NPR1)	3.0	298
80	3784#1	08/03/90	U (NPR1)	3.7	295
81	4380#2	12/18/90	U (NPR1)	6.1	294
82	4682	08/16/90	D (NPR2)	26.0	291
83	1784	12/23/83	U (NPR1)	14.1	287
84	4640	08/22/90	D (NPR2)	50.7	282
85	4663#2	12/11/90		.	275
86	4307	08/03/90		.	270
87	1314	12/18/81	U (NPR1)	7.0	262
88	4306	08/01/90	U (NPR1)	4.5	252
89	4380#1	08/09/90	U (NPR1)	10.3	248
90	136	12/15/81	U (NPR1)	3.1	243
91	4626	07/24/90	U (NPR1)	2.7	234
92	4025	07/25/90	U (NPR1)	3.3	174
93	4304	07/25/90	U (NPR1)	16.4	151

OBS	FOX_ID	DATE	SITE	AVGDIST	GA
1	4106	07/31/90	U-CR	.	2.6
2	3895	10/19/90	U-CR	.	1.0
3	1304	12/29/81	U (NPR1)	3.4	-0.5
4	1309	11/19/81	D (NPR1)	19.3	-0.5
5	1318	12/29/81	D (NPR1)	17.4	-0.5
6	1348#1	12/22/81	D (NPR1)	17.6	-0.5
7	1348#2	08/03/82	D (NPR1)	17.6	-0.5
8	1350	01/08/82	D (NPR1)	26.0	-0.5
9	1419	11/19/81	D (NPR1)	25.3	-0.5
10	1423	12/23/81	D (NPR1)	16.2	-0.5
11	1424	12/22/81	D (NPR1)	18.0	-0.5
12	1425	12/23/81	D (NPR1)	16.2	-0.5
13	1611	12/22/81	D (NPR1)	17.9	-0.5
14	1644	08/25/81	U (NPR1)	13.7	-0.5
15	1681	09/01/81	D (NPR1)	18.5	-0.5
16	1725	09/01/81	D (NPR1)	20.5	-0.5
17	1733	09/02/81	D (NPR1)	21.5	-0.5
18	1745	09/01/81	U (NPR1)	13.7	-0.5
19	1756	11/04/81	U-ELK.	.	-0.5
20	1757	11/04/81	U-ELK.	.	-0.5
21	1758	11/04/81	U-ELK.	.	-0.5
22	1759	11/04/81	U-ELK.	.	-0.5
23	1761	11/04/81	U-ELK.	.	-0.5
24	1771	11/04/81	U-ELK.	.	-0.5
25	2065	08/03/82	D (NPR1)	17.6	-0.5
26	3180	12/15/90	D (NPR2)	31.3	-0.5
27	3212	08/22/90	U-CR	.	-0.5
28	3250	07/27/90	U (NPR1)	3.0	-0.5
29	3290	07/25/90	U (NPR1)	3.0	-0.5
30	3393	09/19/90	U-CR	.	-0.5
31	3399	10/05/90	U-CR	.	-0.5
32	3562	06/16/90	D (NPR2)	34.6	-0.5
33	3589	05/10/90	U-CR	.	-0.5
34	3590	05/09/90	U-CR	.	-0.5
35	3612	04/26/90	U (NPR1)	.	-0.5
36	3684	08/23/90	D (NPR2)	50.7	-0.5
37	3700	12/12/90	D (NPR2)	41.8	-0.5
38	3713	11/29/90		.	-0.5
39	3727	10/12/90	U-CR	.	-0.5
40	3784#1	08/03/90	U (NPR1)	3.7	-0.5
41	3784#2	11/28/90	U (NPR1)	2.6	-0.5
42	3792	08/24/90	D (NPR2)	28.9	-0.5
43	3806	08/31/90	U-CR	.	-0.5
44	3808	08/08/90	U-CR	.	-0.5
45	3810	08/02/90	U-CR	.	-0.5
46	3818	04/25/90	U-CR	.	-0.5
47	3819	04/25/90	U-CR	.	-0.5
48	3845	04/26/90	U-CR	.	-0.5
49	3859	08/03/90	U-CR	.	-0.5

OBS	FOX_ID	DATE	SITE	AVGDIST	GA
50	3868	10/02/90	U-CR	.	-0.5
51	3883	08/01/90	U-CR	.	-0.5
52	3884	11/29/90	U-CR	.	-0.5
53	3893	06/12/90	U-CR	.	-0.5
54	3989	12/06/90	D (NPR1)	24.0	-0.5
55	4025	07/25/90	U (NPR1)	3.3	-0.5
56	4073	05/09/90	U (NPR1)	27.3	-0.5
57	4304	07/25/90	U (NPR1)	16.4	-0.5
58	4306	08/01/90	U (NPR1)	4.5	-0.5
59	4307	08/03/90		.	-0.5
60	4313	07/25/90	U (NPR1)	12.3	-0.5
61	4328	08/22/90	D (NPR2)	37.4	-0.5
62	4335	12/14/90		.	-0.5
63	4343	12/15/90	D (NPR2)	27.7	-0.5
64	4353	07/31/90	U (NPR1)	.	-0.5
65	4373#2	08/16/90	D (NPR1)	17.6	-0.5
66	4380#2	12/18/90	U (NPR1)	6.1	-0.5
67	4385#2	12/12/90	D (NPR2)	48.1	-0.5
68	4616	12/05/90		.	-0.5
69	4626	07/24/90	U (NPR1)	2.7	-0.5
70	4654	12/07/90	D (NPR1)	17.9	-0.5
71	4663#2	12/11/90		.	-0.5
72	4682	08/16/90	D (NPR2)	26.0	-0.5
73	4703	12/13/90	D (NPR2)	26.6	-0.5
74	4704	12/15/90	D (NPR2)	25.6	-0.5
75	1731	09/03/81	D (NPR1)	21.5	-0.6
76	4373#1	05/09/90	D (NPR1)	17.6	-0.6
77	4380#1	08/09/90	U (NPR1)	10.3	-0.6
78	4640	08/22/90	D (NPR2)	50.7	-0.6
79	4355	08/01/90	U (NPR1)	1.0	-0.7
80	2063	08/03/82	D (NPR1)	17.6	-0.8
81	4326	08/07/90		.	-0.8
82	1736	09/03/81	D (NPR1)	21.4	-1.0
83	3817	08/28/90	U-CR	.	-1.8
84	125	12/22/81	U (NPR1)	3.0	.
85	1314	12/18/81	U (NPR1)	7.0	.
86	1320	12/23/81	U (NPR1)	17.7	.
87	1324	09/02/81	D (NPR1)	21.9	.
88	1326	01/06/82	D (NPR1)	21.9	.
89	1345	12/22/81	U (NPR1)	13.8	.
90	136	12/15/81	U (NPR1)	3.1	.
91	1408	12/23/81	D (NPR1)	21.4	.
92	1776	12/15/81	U (NPR1)	5.7	.
93	1784	12/23/83	U (NPR1)	14.1	.

OBS	FOX_ID	DATE	SITE	AVGDIST	HF
1	3817	08/28/90	U-CR	.	0.23
2	3589	05/10/90	U-CR	.	0.14
3	3895	10/19/90	U-CR	.	0.14
4	3727	10/12/90	U-CR	.	0.13
5	3845	04/26/90	U-CR	.	0.13
6	3893	06/12/90	U-CR	.	0.10
7	3212	08/22/90	U-CR	.	0.09
8	3399	10/05/90	U-CR	.	0.09
9	3810	08/02/90	U-CR	.	0.09
10	3819	04/25/90	U-CR	.	0.09
11	3868	10/02/90	U-CR	.	0.09
12	1757	11/04/81	U-ELK.	.	0.08
13	3806	08/31/90	U-CR	.	0.08
14	4355	08/01/90	U (NPR1)	1.0	0.08
15	3590	05/09/90	U-CR	.	0.07
16	3808	08/08/90	U-CR	.	0.07
17	3818	04/25/90	U-CR	.	0.07
18	1318	12/29/81	D (NPR1)	17.4	0.06
19	1348#1	12/22/81	D (NPR1)	17.6	0.06
20	1731	09/03/81	D (NPR1)	21.5	0.06
21	1761	11/04/81	U-ELK.	.	0.06
22	1784	12/23/83	U (NPR1)	14.1	0.06
23	3393	09/19/90	U-CR	.	0.06
24	3562	06/16/90	D (NPR2)	34.6	0.06
25	3859	08/03/90	U-CR	.	0.06
26	3883	08/01/90	U-CR	.	0.06
27	4106	07/31/90	U-CR	.	0.06
28	1320	12/23/81	U (NPR1)	17.7	0.05
29	1324	09/02/81	D (NPR1)	21.9	0.05
30	1345	12/22/81	U (NPR1)	13.8	0.05
31	1350	01/08/82	D (NPR1)	26.0	0.05
32	1681	09/01/81	D (NPR1)	18.5	0.05
33	1736	09/03/81	D (NPR1)	21.4	0.05
34	1771	11/04/81	U-ELK.	.	0.05
35	3713	11/29/90		.	0.05
36	3884	11/29/90	U-CR	.	0.05
37	4640	08/22/90	D (NPR2)	50.7	0.05
38	1304	12/29/81	U (NPR1)	3.4	0.04
39	1309	11/19/81	D (NPR1)	19.3	0.04
40	1326	01/06/82	D (NPR1)	21.9	0.04
41	1419	11/19/81	D (NPR1)	25.3	0.04
42	1425	12/23/81	D (NPR1)	16.2	0.04
43	1725	09/01/81	D (NPR1)	20.5	0.04
44	1756	11/04/81	U-ELK.	.	0.04
45	1758	11/04/81	U-ELK.	.	0.04
46	3684	08/23/90	D (NPR2)	50.7	0.04
47	3784#1	08/03/90	U (NPR1)	3.7	0.04
48	3989	12/06/90	D (NPR1)	24.0	0.04
49	4328	08/22/90	D (NPR2)	37.4	0.04

OBS	FOX_ID	DATE	SITE	AVGDIST	HF
50	4353	07/31/90	U (NPR1)	.	0.04
51	4380#2	12/18/90	U (NPR1)	6.1	0.04
52	125	12/22/81	U (NPR1)	3.0	0.03
53	1314	12/18/81	U (NPR1)	7.0	0.03
54	1408	12/23/81	D (NPR1)	21.4	0.03
55	1423	12/23/81	D (NPR1)	16.2	0.03
56	1611	12/22/81	D (NPR1)	17.9	0.03
57	1733	09/02/81	D (NPR1)	21.5	0.03
58	1745	09/01/81	U (NPR1)	13.7	0.03
59	1759	11/04/81	U-ELK.	.	0.03
60	1776	12/15/81	U (NPR1)	5.7	0.03
61	2065	08/03/82	D (NPR1)	17.6	0.03
62	3250	07/27/90	U (NPR1)	3.0	0.03
63	3700	12/12/90	D (NPR2)	41.8	0.03
64	4025	07/25/90	U (NPR1)	3.3	0.03
65	4335	12/14/90		.	0.03
66	4373#2	08/16/90	D (NPR1)	17.6	0.03
67	4704	12/15/90	D (NPR2)	25.6	0.03
68	1644	08/25/81	U (NPR1)	13.7	0.02
69	3612	04/26/90	U (NPR1)	.	0.02
70	3792	08/24/90	D (NPR2)	28.9	0.02
71	4073	05/09/90	U (NPR1)	27.3	0.02
72	4306	08/01/90	U (NPR1)	4.5	0.02
73	4343	12/15/90	D (NPR2)	27.7	0.02
74	4373#1	05/09/90	D (NPR1)	17.6	0.02
75	4654	12/07/90	D (NPR1)	17.9	0.02
76	3784#2	11/28/90	U (NPR1)	2.6	0.01
77	4385#2	12/12/90	D (NPR2)	48.1	0.01
78	136	12/15/81	U (NPR1)	3.1	-0.01
79	1424	12/22/81	D (NPR1)	18.0	-0.01
80	3180	12/15/90	D (NPR2)	31.3	-0.01
81	3290	07/25/90	U (NPR1)	3.0	-0.01
82	4304	07/25/90	U (NPR1)	16.4	-0.01
83	4307	08/03/90		.	-0.01
84	4313	07/25/90	U (NPR1)	12.3	-0.01
85	4326	08/07/90		.	-0.01
86	4380#1	08/09/90	U (NPR1)	10.3	-0.01
87	4616	12/05/90		.	-0.01
88	4626	07/24/90	U (NPR1)	2.7	-0.01
89	4663#2	12/11/90		.	-0.01
90	4682	08/16/90	D (NPR2)	26.0	-0.01
91	4703	12/13/90	D (NPR2)	26.6	-0.01
92	1348#2	08/03/82	D (NPR1)	17.6	-0.02
93	2063	08/03/82	D (NPR1)	17.6	-0.02

OBS	FOX_ID	DATE	SITE	AVGDIST	HG
1	3817	08/28/90	U-CR	.	10.00
2	3684	08/23/90	D (NPR2)	50.7	3.90
3	3806	08/31/90	U-CR	.	3.00
4	3868	10/02/90	U-CR	.	2.80
5	3819	04/25/90	U-CR	.	2.70
6	4616	12/05/90		.	2.70
7	3590	05/09/90	U-CR	.	2.60
8	3884	11/29/90	U-CR	.	2.60
9	3818	04/25/90	U-CR	.	2.30
10	3393	09/19/90	U-CR	.	2.20
11	3589	05/10/90	U-CR	.	2.00
12	4106	07/31/90	U-CR	.	1.90
13	4703	12/13/90	D (NPR2)	26.6	1.60
14	3845	04/26/90	U-CR	.	1.50
15	3893	06/12/90	U-CR	.	1.50
16	3212	08/22/90	U-CR	.	1.40
17	3883	08/01/90	U-CR	.	1.40
18	3895	10/19/90	U-CR	.	1.40
19	4385#2	12/12/90	D (NPR2)	48.1	1.30
20	3700	12/12/90	D (NPR2)	41.8	1.20
21	3727	10/12/90	U-CR	.	1.20
22	4654	12/07/90	D (NPR1)	17.9	1.20
23	3399	10/05/90	U-CR	.	1.10
24	4380#2	12/18/90	U (NPR1)	6.1	1.00
25	3808	08/08/90	U-CR	.	0.97
26	3989	12/06/90	D (NPR1)	24.0	0.96
27	3810	08/02/90	U-CR	.	0.89
28	3859	08/03/90	U-CR	.	0.84
29	4335	12/14/90		.	0.83
30	4626	07/24/90	U (NPR1)	2.7	0.80
31	3612	04/26/90	U (NPR1)	.	0.76
32	3562	06/16/90	D (NPR2)	34.6	0.74
33	4682	08/16/90	D (NPR2)	26.0	0.74
34	3290	07/25/90	U (NPR1)	3.0	0.68
35	1681	09/01/81	D (NPR1)	18.5	0.67
36	1304	12/29/81	U (NPR1)	3.4	0.66
37	1318	12/29/81	D (NPR1)	17.4	0.65
38	4343	12/15/90	D (NPR2)	27.7	0.65
39	3713	11/29/90		.	0.61
40	4328	08/22/90	D (NPR2)	37.4	0.61
41	4355	08/01/90	U (NPR1)	1.0	0.55
42	4373#2	08/16/90	D (NPR1)	17.6	0.55
43	3250	07/27/90	U (NPR1)	3.0	0.54
44	1350	01/08/82	D (NPR1)	26.0	0.53
45	4326	08/07/90		.	0.52
46	4640	08/22/90	D (NPR2)	50.7	0.52
47	1725	09/01/81	D (NPR1)	20.5	0.50
48	4704	12/15/90	D (NPR2)	25.6	0.48
49	1425	12/23/81	D (NPR1)	16.2	0.47

OBS	FOX_ID	DATE	SITE	AVGDIST	HG
50	1309	11/19/81	D (NPR1)	19.3	0.46
51	1756	11/04/81	U-ELK.	.	0.44
52	1348#2	08/03/82	D (NPR1)	17.6	0.43
53	1423	12/23/81	D (NPR1)	16.2	0.43
54	2063	08/03/82	D (NPR1)	17.6	0.43
55	4025	07/25/90	U (NPR1)	3.3	0.43
56	1745	09/01/81	U (NPR1)	13.7	0.42
57	1759	11/04/81	U-ELK.	.	0.41
58	1419	11/19/81	D (NPR1)	25.3	0.40
59	3792	08/24/90	D (NPR2)	28.9	0.40
60	4304	07/25/90	U (NPR1)	16.4	0.40
61	4353	07/31/90	U (NPR1)	.	0.40
62	4663#2	12/11/90		.	0.39
63	1644	08/25/81	U (NPR1)	13.7	0.37
64	1761	11/04/81	U-ELK.	.	0.37
65	3784#1	08/03/90	U (NPR1)	3.7	0.36
66	3784#2	11/28/90	U (NPR1)	2.6	0.36
67	4380#1	08/09/90	U (NPR1)	10.3	0.36
68	4073	05/09/90	U (NPR1)	27.3	0.35
69	4313	07/25/90	U (NPR1)	12.3	0.35
70	4373#1	05/09/90	D (NPR1)	17.6	0.35
71	1758	11/04/81	U-ELK.	.	0.34
72	4307	08/03/90		.	0.32
73	1611	12/22/81	D (NPR1)	17.9	0.31
74	2065	08/03/82	D (NPR1)	17.6	0.31
75	1731	09/03/81	D (NPR1)	21.5	0.30
76	1348#1	12/22/81	D (NPR1)	17.6	0.29
77	1424	12/22/81	D (NPR1)	18.0	0.28
78	3180	12/15/90	D (NPR2)	31.3	0.28
79	1771	11/04/81	U-ELK.	.	0.27
80	1733	09/02/81	D (NPR1)	21.5	0.25
81	1757	11/04/81	U-ELK.	.	0.25
82	4306	08/01/90	U (NPR1)	4.5	0.25
83	1736	09/03/81	D (NPR1)	21.4	0.21
84	125	12/22/81	U (NPR1)	3.0	.
85	1314	12/18/81	U (NPR1)	7.0	.
86	1320	12/23/81	U (NPR1)	17.7	.
87	1324	09/02/81	D (NPR1)	21.9	.
88	1326	01/06/82	D (NPR1)	21.9	.
89	1345	12/22/81	U (NPR1)	13.8	.
90	136	12/15/81	U (NPR1)	3.1	.
91	1408	12/23/81	D (NPR1)	21.4	.
92	1776	12/15/81	U (NPR1)	5.7	.
93	1784	12/23/83	U (NPR1)	14.1	.

OBS	FOX_ID	DATE	SITE	AVGDIST	I
1	3612	04/26/90	U (NPR1)	.	17.00
2	4106	07/31/90	U-CR	.	16.00
3	1348#1	12/22/81	D (NPR1)	17.6	13.00
4	2065	08/03/82	D (NPR1)	17.6	12.00
5	4640	08/22/90	D (NPR2)	50.7	11.00
6	1320	12/23/81	U (NPR1)	17.7	10.60
7	3817	08/28/90	U-CR	.	9.50
8	3684	08/23/90	D (NPR2)	50.7	7.30
9	2063	08/03/82	D (NPR1)	17.6	4.90
10	4355	08/01/90	U (NPR1)	1.0	4.90
11	1733	09/02/81	D (NPR1)	21.5	4.10
12	1736	09/03/81	D (NPR1)	21.4	3.90
13	1644	08/25/81	U (NPR1)	13.7	3.80
14	3784#1	08/03/90	U (NPR1)	3.7	3.50
15	4373#2	08/16/90	D (NPR1)	17.6	3.30
16	1348#2	08/03/82	D (NPR1)	17.6	3.10
17	4304	07/25/90	U (NPR1)	16.4	3.00
18	4353	07/31/90	U (NPR1)	.	2.90
19	4326	08/07/90		.	2.80
20	4626	07/24/90	U (NPR1)	2.7	2.80
21	4703	12/13/90	D (NPR2)	26.6	2.80
22	1681	09/01/81	D (NPR1)	18.5	2.60
23	1745	09/01/81	U (NPR1)	13.7	2.60
24	3713	11/29/90		.	2.60
25	1318	12/29/81	D (NPR1)	17.4	2.40
26	4380#1	08/09/90	U (NPR1)	10.3	2.30
27	1345	12/22/81	U (NPR1)	13.8	2.29
28	3819	04/25/90	U-CR	.	2.20
29	4307	08/03/90		.	2.10
30	1731	09/03/81	D (NPR1)	21.5	2.00
31	3590	05/09/90	U-CR	.	2.00
32	1350	01/08/82	D (NPR1)	26.0	1.90
33	3700	12/12/90	D (NPR2)	41.8	1.90
34	1423	12/23/81	D (NPR1)	16.2	1.80
35	3250	07/27/90	U (NPR1)	3.0	1.80
36	3562	06/16/90	D (NPR2)	34.6	1.80
37	3806	08/31/90	U-CR	.	1.80
38	4328	08/22/90	D (NPR2)	37.4	1.80
39	4073	05/09/90	U (NPR1)	27.3	1.70
40	4385#2	12/12/90	D (NPR2)	48.1	1.70
41	4682	08/16/90	D (NPR2)	26.0	1.70
42	1408	12/23/81	D (NPR1)	21.4	1.61
43	1324	09/02/81	D (NPR1)	21.9	1.51
44	1309	11/19/81	D (NPR1)	19.3	1.50
45	1419	11/19/81	D (NPR1)	25.3	1.50
46	3893	06/12/90	U-CR	.	1.50
47	4313	07/25/90	U (NPR1)	12.3	1.50
48	1314	12/18/81	U (NPR1)	7.0	1.45
49	1326	01/06/82	D (NPR1)	21.9	1.40

OBS	FOX_ID	DATE	SITE	AVGDIST	I
50	4343	12/15/90	D (NPR2)	27.7	1.40
51	1304	12/29/81	U (NPR1)	3.4	1.30
52	1611	12/22/81	D (NPR1)	17.9	1.30
53	3399	10/05/90	U-CR	.	1.30
54	3845	04/26/90	U-CR	.	1.30
55	125	12/22/81	U (NPR1)	3.0	1.21
56	1784	12/23/83	U (NPR1)	14.1	1.20
57	3784#2	11/28/90	U (NPR1)	2.6	1.20
58	1725	09/01/81	D (NPR1)	20.5	1.10
59	3792	08/24/90	D (NPR2)	28.9	1.10
60	3818	04/25/90	U-CR	.	1.10
61	4025	07/25/90	U (NPR1)	3.3	1.10
62	1425	12/23/81	D (NPR1)	16.2	1.00
63	3290	07/25/90	U (NPR1)	3.0	1.00
64	3883	08/01/90	U-CR	.	1.00
65	4306	08/01/90	U (NPR1)	4.5	1.00
66	4373#1	05/09/90	D (NPR1)	17.6	1.00
67	3989	12/06/90	D (NPR1)	24.0	0.90
68	1776	12/15/81	U (NPR1)	5.7	0.83
69	1756	11/04/81	U-ELK.	.	0.80
70	1758	11/04/81	U-ELK.	.	0.80
71	1761	11/04/81	U-ELK.	.	0.80
72	3895	10/19/90	U-CR	.	0.80
73	4654	12/07/90	D (NPR1)	17.9	0.80
74	4663#2	12/11/90		.	0.80
75	136	12/15/81	U (NPR1)	3.1	0.78
76	1757	11/04/81	U-ELK.	.	0.70
77	3180	12/15/90	D (NPR2)	31.3	0.70
78	3393	09/19/90	U-CR	.	0.70
79	4335	12/14/90		.	0.70
80	4380#2	12/18/90	U (NPR1)	6.1	0.70
81	1759	11/04/81	U-ELK.	.	0.60
82	3589	05/10/90	U-CR	.	0.60
83	3810	08/02/90	U-CR	.	0.60
84	4704	12/15/90	D (NPR2)	25.6	0.60
85	1771	11/04/81	U-ELK.	.	0.50
86	3859	08/03/90	U-CR	.	0.40
87	3808	08/08/90	U-CR	.	0.30
88	3868	10/02/90	U-CR	.	0.30
89	1424	12/22/81	D (NPR1)	18.0	-0.30
90	4616	12/05/90		.	-0.30
91	3212	08/22/90	U-CR	.	-0.50
92	3727	10/12/90	U-CR	.	-0.50
93	3884	11/29/90	U-CR	.	-0.50

OBS	FOX_ID	DATE	SITE	AVGDIST	IN
1	3727	10/12/90	U-CR	.	0.007
2	4703	12/13/90	D (NPR2)	26.6	0.007
3	1304	12/29/81	U (NPR1)	3.4	-.005
4	1309	11/19/81	D (NPR1)	19.3	-.005
5	1318	12/29/81	D (NPR1)	17.4	-.005
6	1348#1	12/22/81	D (NPR1)	17.6	-.005
7	1348#2	08/03/82	D (NPR1)	17.6	-.005
8	1350	01/08/82	D (NPR1,	26.0	-.005
9	1419	11/19/81	D (NPR1)	25.3	-.005
10	1423	12/23/81	D (NPR1)	16.2	-.005
11	1424	12/22/81	D (NPR1)	18.0	-.005
12	1425	12/23/81	D (NPR1)	16.2	-.005
13	1611	12/22/81	D (NPR1)	17.9	-.005
14	1644	08/25/81	U (NPR1)	13.7	-.005
15	1681	09/01/81	D (NPR1)	18.5	-.005
16	1725	09/01/81	D (NPR1)	20.5	-.005
17	1731	09/03/81	D (NPR1)	21.5	-.005
18	1733	09/02/81	D (NPR1)	21.5	-.005
19	1736	09/03/81	D (NPR1)	21.4	-.005
20	1745	09/01/81	U (NPR1)	13.7	-.005
21	1756	11/04/81	U-ELK.	.	-.005
22	1757	11/04/81	U-ELK.	.	-.005
23	1758	11/04/81	U-ELK.	.	-.005
24	1759	11/04/81	U-ELK.	.	-.005
25	1761	11/04/81	U-ELK.	.	-.005
26	1771	11/04/81	U-ELK.	.	-.005
27	2063	08/03/82	D (NPR1)	17.6	-.005
28	2065	08/03/82	D (NPR1)	17.6	-.005
29	3180	12/15/90	D (NPR2)	31.3	-.005
30	3212	08/22/90	U-CR	.	-.005
31	3250	07/27/90	U (NPR1)	3.0	-.005
32	3290	07/25/90	U (NPR1)	3.0	-.005
33	3393	09/19/90	U-CR	.	-.005
34	3399	10/05/90	U-CR	.	-.005
35	3562	06/16/90	D (NPR2)	34.6	-.005
36	3589	05/10/90	U-CR	.	-.005
37	3590	05/09/90	U-CR	.	-.005
38	3612	04/26/90	U (NPR1)	.	-.005
39	3684	08/23/90	D (NPR2)	50.7	-.005
40	3700	12/12/90	D (NPR2)	41.8	-.005
41	3713	11/29/90		.	-.005
42	3784#1	08/03/90	U (NPR1)	3.7	-.005
43	3784#2	11/28/90	U (NPR1)	2.6	-.005
44	3792	08/24/90	D (NPR2)	28.9	-.005
45	3806	08/31/90	U-CR	.	-.005
46	3808	08/08/90	U-CR	.	-.005
47	3810	08/02/90	U-CR	.	-.005
48	3817	08/28/90	U-CR	.	-.005
49	3818	04/25/90	U-CR	.	-.005

OBS	FOX_ID	DATE	SITE	AVGDIST	IN
50	3819	04/25/90	U-CR	.	-.005
51	3845	04/26/90	U-CR	.	-.005
52	3859	08/03/90	U-CR	.	-.005
53	3868	10/02/90	U-CR	.	-.005
54	3883	08/01/90	U-CR	.	-.005
55	3884	11/29/90	U-CR	.	-.005
56	3893	06/12/90	U-CR	.	-.005
57	3895	10/19/90	U-CR	.	-.005
58	3989	12/06/90	D (NPR1)	24.0	-.005
59	4025	07/25/90	U (NPR1)	3.3	-.005
60	4073	05/09/90	U (NPR1)	27.3	-.005
61	4106	07/31/90	U-CR	.	-.005
62	4304	07/25/90	U (NPR1)	16.4	-.005
63	4306	08/01/90	U (NPR1)	4.5	-.005
64	4307	08/03/90		.	-.005
65	4313	07/25/90	U (NPR1)	12.3	-.005
66	4326	08/07/90		.	-.005
67	4328	08/22/90	D (NPR2)	37.4	-.005
68	4335	12/14/90		.	-.005
69	4343	12/15/90	D (NPR2)	27.7	-.005
70	4353	07/31/90	U (NPR1)	.	-.005
71	4355	08/01/90	U (NPR1)	1.0	-.005
72	4373#1	05/09/90	D (NPR1)	17.6	-.005
73	4373#2	08/16/90	D (NPR1)	17.6	-.005
74	4380#1	08/09/90	U (NPR1)	10.3	-.005
75	4380#2	12/18/90	U (NPR1)	6.1	-.005
76	4385#2	12/12/90	D (NPR2)	48.1	-.005
77	4616	12/05/90		.	-.005
78	4626	07/24/90	U (NPR1)	2.7	-.005
79	4640	08/22/90	D (NPR2)	50.7	-.005
80	4654	12/07/90	D (NPR1)	17.9	-.005
81	4663#2	12/11/90		.	-.005
82	4682	08/16/90	D (NPR2)	26.0	-.005
83	4704	12/15/90	D (NPR2)	25.6	-.005
84	125	12/22/81	U (NPR1)	3.0	.
85	1314	12/18/81	U (NPR1)	7.0	.
86	1320	12/23/81	U (NPR1)	17.7	.
87	1324	09/02/81	D (NPR1)	21.9	.
88	1326	01/06/82	D (NPR1)	21.9	.
89	1345	12/22/81	U (NPR1)	13.8	.
90	136	12/15/81	U (NPR1)	3.1	.
91	1408	12/23/81	D (NPR1)	21.4	.
92	1776	12/15/81	U (NPR1)	5.7	.
93	1784	12/23/83	U (NPR1)	14.1	.

OBS	FOX_ID	DATE	SITE	AVGDIST	IR
1	1756	11/04/81	U-ELK.	.	0.1
2	125	12/22/81	U (NPR1)	3.0	-0.1
3	1304	12/29/81	U (NPR1)	3.4	-0.1
4	1309	11/19/81	D (NPR1)	19.3	-0.1
5	1314	12/18/81	U (NPR1)	7.0	-0.1
6	1318	12/29/81	D (NPR1)	17.4	-0.1
7	1320	12/23/81	U (NPR1)	17.7	-0.1
8	1324	09/02/81	D (NPR1)	21.9	-0.1
9	1326	01/06/82	D (NPR1)	21.9	-0.1
10	1345	12/22/81	U (NPR1)	13.8	-0.1
11	1350	01/08/82	D (NPR1)	26.0	-0.1
12	136	12/15/81	U (NPR1)	3.1	-0.1
13	1408	12/23/81	D (NPR1)	21.4	-0.1
14	1419	11/19/81	D (NPR1)	25.3	-0.1
15	1423	12/23/81	D (NPR1)	16.2	-0.1
16	1611	12/22/81	D (NPR1)	17.9	-0.1
17	1644	08/25/81	U (NPR1)	13.7	-0.1
18	1681	09/01/81	D (NPR1)	18.5	-0.1
19	1725	09/01/81	D (NPR1)	20.5	-0.1
20	1733	09/02/81	D (NPR1)	21.5	-0.1
21	1745	09/01/81	U (NPR1)	13.7	-0.1
22	1757	11/04/81	U-ELK.	.	-0.1
23	1758	11/04/81	U-ELK.	.	-0.1
24	1759	11/04/81	U-ELK.	.	-0.1
25	1761	11/04/81	U-ELK.	.	-0.1
26	1771	11/04/81	U-ELK.	.	-0.1
27	1776	12/15/81	U (NPR1)	5.7	-0.1
28	1784	12/23/83	U (NPR1)	14.1	-0.1
29	3180	12/15/90	D (NPR2)	31.3	-0.1
30	3212	08/22/90	U-CR	.	-0.1
31	3250	07/27/90	U (NPR1)	3.0	-0.1
32	3290	07/25/90	U (NPR1)	3.0	-0.1
33	3393	09/19/90	U-CR	.	-0.1
34	3399	10/05/90	U-CR	.	-0.1
35	3562	06/16/90	D (NPR2)	34.6	-0.1
36	3589	05/10/90	U-CR	.	-0.1
37	3590	05/09/90	U-CR	.	-0.1
38	3612	04/26/90	U (NPR1)	.	-0.1
39	3684	08/23/90	D (NPR2)	50.7	-0.1
40	3700	12/12/90	D (NPR2)	41.8	-0.1
41	3713	11/29/90		.	-0.1
42	3727	10/12/90	U-CR	.	-0.1
43	3784#1	08/03/90	U (NPR1)	3.7	-0.1
44	3784#2	11/28/90	U (NPR1)	2.6	-0.1
45	3792	08/24/90	D (NPR2)	28.9	-0.1
46	3806	08/31/90	U-CR	.	-0.1
47	3808	08/08/90	U-CR	.	-0.1
48	3810	08/02/90	U-CR	.	-0.1
49	3818	04/25/90	U-CR	.	-0.1

OBS	FOX_ID	DATE	SITE	AVGDIST	IR
50	3819	04/25/90	U-CR	.	-0.1
51	3845	04/26/90	U-CR	.	-0.1
52	3859	08/03/90	U-CR	.	-0.1
53	3883	08/01/90	U-CR	.	-0.1
54	3884	11/29/90	U-CR	.	-0.1
55	3893	06/12/90	U-CR	.	-0.1
56	3895	10/19/90	U-CR	.	-0.1
57	3989	12/06/90	D (NPR1)	24.0	-0.1
58	4025	07/25/90	U (NPR1)	3.3	-0.1
59	4073	05/09/90	U (NPR1)	27.3	-0.1
60	4307	08/03/90		.	-0.1
61	4313	07/25/90	U (NPR1)	12.3	-0.1
62	4328	08/22/90	D (NPR2)	37.4	-0.1
63	4335	12/14/90		.	-0.1
64	4343	12/15/90	D (NPR2)	27.7	-0.1
65	4373#2	08/16/90	D (NPR1)	17.6	-0.1
66	4380#2	12/18/90	U (NPR1)	6.1	-0.1
67	4385#2	12/12/90	D (NPR2)	48.1	-0.1
68	4654	12/07/90	D (NPR1)	17.9	-0.1
69	4703	12/13/90	D (NPR2)	26.6	-0.1
70	4704	12/15/90	D (NPR2)	25.6	-0.1
71	1348#1	12/22/81	D (NPR1)	17.6	-0.2
72	1348#2	08/03/82	D (NPR1)	17.6	-0.2
73	1424	12/22/81	D (NPR1)	18.0	-0.2
74	1425	12/23/81	D (NPR1)	16.2	-0.2
75	1731	09/03/81	D (NPR1)	21.5	-0.2
76	2065	08/03/82	D (NPR1)	17.6	-0.2
77	3868	10/02/90	U-CR	.	-0.2
78	4106	07/31/90	U-CR	.	-0.2
79	4304	07/25/90	U (NPR1)	16.4	-0.2
80	4306	08/01/90	U (NPR1)	4.5	-0.2
81	4326	08/07/90		.	-0.2
82	4353	07/31/90	U (NPR1)	.	-0.2
83	4373#1	05/09/90	D (NPR1)	17.6	-0.2
84	4380#1	08/09/90	U (NPR1)	10.3	-0.2
85	4616	12/05/90		.	-0.2
86	4626	07/24/90	U (NPR1)	2.7	-0.2
87	4640	08/22/90	D (NPR2)	50.7	-0.2
88	4663#2	12/11/90		.	-0.2
89	4682	08/16/90	D (NPR2)	26.0	-0.2
90	1736	09/03/81	D (NPR1)	21.4	-0.3
91	2063	08/03/82	D (NPR1)	17.6	-0.3
92	4355	08/01/90	U (NPR1)	1.0	-0.3
93	3817	08/28/90	U-CR	.	-0.7

OBS	FOX_ID	DATE	SITE	AVGDIST	K
1	3884	11/29/90	U-CR	.	1300
2	3845	04/26/90	U-CR	.	580
3	3589	05/10/90	U-CR	.	560
4	3895	10/19/90	U-CR	.	550
5	3727	10/12/90	U-CR	.	460
6	3819	04/25/90	U-CR	.	450
7	1757	11/04/81	U-ELK.	.	400
8	1771	11/04/81	U-ELK.	.	390
9	1318	12/29/81	D (NPR1)	17.4	360
10	3806	08/31/90	U-CR	.	340
11	1320	12/23/81	U (NPR1)	17.7	310
12	3893	06/12/90	U-CR	.	290
13	1326	01/06/82	D (NPR1)	21.9	280
14	3212	08/22/90	U-CR	.	280
15	3399	10/05/90	U-CR	.	280
16	1348#1	12/22/81	D (NPR1)	17.6	270
17	3810	08/02/90	U-CR	.	270
18	1731	09/03/81	D (NPR1)	21.5	250
19	3684	08/23/90	D (NPR2)	50.7	250
20	3868	10/02/90	U-CR	.	250
21	1761	11/04/81	U-ELK.	.	240
22	3590	05/09/90	U-CR	.	240
23	3859	08/03/90	U-CR	.	240
24	1350	01/08/82	D (NPR1)	26.0	230
25	3393	09/19/90	U-CR	.	230
26	3562	06/16/90	D (NPR2)	34.6	220
27	1681	09/01/81	D (NPR1)	18.5	210
28	3713	11/29/90		.	210
29	1759	11/04/81	U-ELK.	.	200
30	3808	08/08/90	U-CR	.	200
31	1733	09/02/81	D (NPR1)	21.5	190
32	1758	11/04/81	U-ELK.	.	190
33	1784	12/23/83	U (NPR1)	14.1	190
34	1345	12/22/81	U (NPR1)	13.8	180
35	1425	12/23/81	D (NPR1)	16.2	180
36	1756	11/04/81	U-ELK.	.	180
37	2065	08/03/82	D (NPR1)	17.6	170
38	3250	07/27/90	U (NPR1)	3.0	170
39	3784#2	11/28/90	U (NPR1)	2.6	170
40	4328	08/22/90	D (NPR2)	37.4	170
41	4616	12/05/90		.	170
42	1419	11/19/81	D (NPR1)	25.3	160
43	4704	12/15/90	D (NPR2)	25.6	160
44	3818	04/25/90	U-CR	.	150
45	4385#2	12/12/90	D (NPR2)	48.1	150
46	125	12/22/81	U (NPR1)	3.0	140
47	1309	11/19/81	D (NPR1)	19.3	140
48	1324	09/02/81	D (NPR1)	21.9	140
49	1408	12/23/81	D (NPR1)	21.4	140

OBS	FOX_ID	DATE	SITE	AVGDIST	K
50	1424	12/22/81	D (NPR1)	18.0	140
51	1304	12/29/81	U (NPR1)	3.4	130
52	1611	12/22/81	D (NPR1)	17.9	130
53	3817	08/28/90	U-CR	.	130
54	1725	09/01/81	D (NPR1)	20.5	120
55	3700	12/12/90	D (NPR2)	41.8	120
56	3883	08/01/90	U-CR	.	120
57	4343	12/15/90	D (NPR2)	27.7	110
58	4654	12/07/90	D (NPR1)	17.9	100
59	136	12/15/81	U (NPR1)	3.1	88
60	1314	12/18/81	U (NPR1)	7.0	84
61	2063	08/03/82	D (NPR1)	17.6	80
62	3792	08/24/90	D (NPR2)	28.9	79
63	4335	12/14/90		.	79
64	1776	12/15/81	U (NPR1)	5.7	74
65	1644	08/25/81	U (NPR1)	13.7	73
66	4373#1	05/09/90	D (NPR1)	17.6	71
67	4703	12/13/90	D (NPR2)	26.6	66
68	4380#2	12/18/90	U (NPR1)	6.1	64
69	3989	12/06/90	D (NPR1)	24.0	63
70	1423	12/23/81	D (NPR1)	16.2	55
71	3290	07/25/90	U (NPR1)	3.0	55
72	3784#1	08/03/90	U (NPR1)	3.7	54
73	4626	07/24/90	U (NPR1)	2.7	53
74	4682	08/16/90	D (NPR2)	26.0	53
75	3180	12/15/90	D (NPR2)	31.3	51
76	4073	05/09/90	U (NPR1)	27.3	51
77	1348#2	08/03/82	D (NPR1)	17.6	47
78	3612	04/26/90	U (NPR1)	.	46
79	4640	08/22/90	D (NPR2)	50.7	41
80	4373#2	08/16/90	D (NPR1)	17.6	40
81	4306	08/01/90	U (NPR1)	4.5	28
82	4307	08/03/90		.	28
83	4025	07/25/90	U (NPR1)	3.3	-10
84	4304	07/25/90	U (NPR1)	16.4	-10
85	4313	07/25/90	U (NPR1)	12.3	-10
86	4326	08/07/90		.	-10
87	4353	07/31/90	U (NPR1)	.	-10
88	4355	08/01/90	U (NPR1)	1.0	-10
89	4380#1	08/09/90	U (NPR1)	10.3	-10
90	4663#2	12/11/90		.	-10
91	1745	09/01/81	U (NPR1)	13.7	-17
92	1736	09/03/81	D (NPR1)	21.4	-32
93	4106	07/31/90	U-CR	.	-50

OBS	FOX_ID	DATE	SITE	AVGDIST	LA
1	1318	12/29/81	D (NPR1)	17.4	1.20
2	3589	05/10/90	U-CR	.	1.20
3	3845	04/26/90	U-CR	.	1.10
4	3893	06/12/90	U-CR	.	1.10
5	3895	10/19/90	U-CR	.	1.10
6	3819	04/25/90	U-CR	.	1.00
7	3817	08/28/90	U-CR	.	0.99
8	3810	08/02/90	U-CR	.	0.93
9	3727	10/12/90	U-CR	.	0.91
10	1350	01/08/82	D (NPR1)	26.0	0.89
11	3806	08/31/90	U-CR	.	0.85
12	1326	01/06/82	D (NPR1)	21.9	0.75
13	1681	09/01/81	D (NPR1)	18.5	0.74
14	3399	10/05/90	U-CR	.	0.74
15	1757	11/04/81	U-ELK.	.	0.73
16	3884	11/29/90	U-CR	.	0.73
17	3590	05/09/90	U-CR	.	0.69
18	3212	08/22/90	U-CR	.	0.65
19	1348#1	12/22/81	D (NPR1)	17.6	0.64
20	1771	11/04/81	U-ELK.	.	0.64
21	1731	09/03/81	D (NPR1)	21.5	0.62
22	4616	12/05/90		.	0.62
23	3859	08/03/90	U-CR	.	0.59
24	1304	12/29/81	U (NPR1)	3.4	0.58
25	1320	12/23/81	U (NPR1)	17.7	0.58
26	3818	04/25/90	U-CR	.	0.56
27	1419	11/19/81	D (NPR1)	25.3	0.55
28	1425	12/23/81	D (NPR1)	16.2	0.55
29	3868	10/02/90	U-CR	.	0.55
30	3713	11/29/90		.	0.53
31	3393	09/19/90	U-CR	.	0.52
32	1761	11/04/81	U-ELK.	.	0.51
33	1424	12/22/81	D (NPR1)	18.0	0.50
34	1345	12/22/81	U (NPR1)	13.8	0.49
35	3562	06/16/90	D (NPR2)	34.6	0.48
36	1309	11/19/81	D (NPR1)	19.3	0.47
37	1733	09/02/81	D (NPR1)	21.5	0.47
38	1745	09/01/81	U (NPR1)	13.7	0.46
39	1324	09/02/81	D (NPR1)	21.9	0.45
40	3684	08/23/90	D (NPR2)	50.7	0.45
41	3808	08/08/90	U-CR	.	0.45
42	1756	11/04/81	U-ELK.	.	0.44
43	3250	07/27/90	U (NPR1)	3.0	0.43
44	4306	08/01/90	U (NPR1)	4.5	0.43
45	1644	08/25/81	U (NPR1)	13.7	0.42
46	1759	11/04/81	U-ELK.	.	0.41
47	1784	12/23/83	U (NPR1)	14.1	0.41
48	3290	07/25/90	U (NPR1)	3.0	0.41
49	4328	08/22/90	D (NPR2)	37.4	0.41

OBS	FOX_ID	DATE	SITE	AVGDIST	LA
50	1758	11/04/81	U-ELK.	.	0.40
51	2065	08/03/82	D (NPR1)	17.6	0.40
52	1725	09/01/81	D (NPR1)	20.5	0.39
53	4106	07/31/90	U-CR	.	0.38
54	125	12/22/81	U (NPR1)	3.0	0.37
55	1408	12/23/81	D (NPR1)	21.4	0.37
56	4704	12/15/90	D (NPR2)	25.6	0.37
57	4654	12/07/90	D (NPR1)	17.9	0.36
58	1611	12/22/81	D (NPR1)	17.9	0.34
59	3883	08/01/90	U-CR	.	0.34
60	3784#2	11/28/90	U (NPR1)	2.6	0.33
61	1314	12/18/81	U (NPR1)	7.0	0.32
62	3784#1	08/03/90	U (NPR1)	3.7	0.31
63	4385#2	12/12/90	D (NPR2)	48.1	0.31
64	4640	08/22/90	D (NPR2)	50.7	0.30
65	1423	12/23/81	D (NPR1)	16.2	0.29
66	3612	04/26/90	U (NPR1)	.	0.29
67	136	12/15/81	U (NPR1)	3.1	0.28
68	4373#2	08/16/90	D (NPR1)	17.6	0.28
69	4343	12/15/90	D (NPR2)	27.7	0.27
70	4073	05/09/90	U (NPR1)	27.3	0.25
71	4380#2	12/18/90	U (NPR1)	6.1	0.25
72	4703	12/13/90	D (NPR2)	26.6	0.24
73	4373#1	05/09/90	D (NPR1)	17.6	0.23
74	2063	08/03/82	D (NPR1)	17.6	0.22
75	1348#2	08/03/82	D (NPR1)	17.6	0.21
76	1736	09/03/81	D (NPR1)	21.4	0.21
77	1776	12/15/81	U (NPR1)	5.7	0.21
78	3700	12/12/90	D (NPR2)	41.8	0.21
79	3989	12/06/90	D (NPR1)	24.0	0.21
80	3792	08/24/90	D (NPR2)	28.9	0.20
81	4307	08/03/90		.	0.20
82	4353	07/31/90	U (NPR1)	.	0.17
83	4682	08/16/90	D (NPR2)	26.0	0.17
84	4335	12/14/90		.	0.16
85	3180	12/15/90	D (NPR2)	31.3	0.15
86	4313	07/25/90	U (NPR1)	12.3	0.14
87	4626	07/24/90	U (NPR1)	2.7	0.14
88	4663#2	12/11/90		.	0.14
89	4355	08/01/90	U (NPR1)	1.0	0.13
90	4380#1	08/09/90	U (NPR1)	10.3	0.12
91	4304	07/25/90	U (NPR1)	16.4	0.09
92	4025	07/25/90	U (NPR1)	3.3	0.08
93	4326	08/07/90		.	0.08

OBS	FOX_ID	DATE	SITE	AVGDIST	LU
1	3817	08/28/90	U-CR	.	0.035
2	3589	05/10/90	U-CR	.	0.020
3	3893	06/12/90	U-CR	.	0.017
4	3810	08/02/90	U-CR	.	0.013
5	3845	04/26/90	U-CR	.	0.013
6	3806	08/31/90	U-CR	.	0.012
7	1318	12/29/81	D (NPR1)	17.4	0.011
8	3727	10/12/90	U-CR	.	0.011
9	1348#1	12/22/81	D (NPR1)	17.6	0.010
10	3212	08/22/90	U-CR	.	0.010
11	4616	12/05/90		.	0.010
12	1419	11/19/81	D (NPR1)	25.3	0.009
13	1731	09/03/81	D (NPR1)	21.5	0.009
14	1756	11/04/81	U-ELK.	.	0.009
15	1757	11/04/81	U-ELK.	.	0.009
16	1771	11/04/81	U-ELK.	.	0.009
17	3590	05/09/90	U-CR	.	0.009
18	3819	04/25/90	U-CR	.	0.009
19	1348#2	08/03/82	D (NPR1)	17.6	0.008
20	1424	12/22/81	D (NPR1)	18.0	0.008
21	3399	10/05/90	U-CR	.	0.008
22	3895	10/19/90	U-CR	.	0.008
23	1350	01/08/82	D (NPR1)	26.0	0.007
24	1681	09/01/81	D (NPR1)	18.5	0.007
25	1733	09/02/81	D (NPR1)	21.5	0.007
26	1758	11/04/81	U-ELK.	.	0.007
27	1761	11/04/81	U-ELK.	.	0.007
28	3393	09/19/90	U-CR	.	0.007
29	1644	08/25/81	U (NPR1)	13.7	0.006
30	3250	07/27/90	U (NPR1)	3.0	0.006
31	3562	06/16/90	D (NPR2)	34.6	0.006
32	3808	08/08/90	U-CR	.	0.006
33	3859	08/03/90	U-CR	.	0.006
34	3868	10/02/90	U-CR	.	0.006
35	1309	11/19/81	D (NPR1)	19.3	0.005
36	1320	12/23/81	U (NPR1)	17.7	0.005
37	1784	12/23/83	U (NPR1)	14.1	0.005
38	3713	11/29/90		.	0.005
39	3884	11/29/90	U-CR	.	0.005
40	4328	08/22/90	D (NPR2)	37.4	0.005
41	125	12/22/81	U (NPR1)	3.0	0.004
42	1304	12/29/81	U (NPR1)	3.4	0.004
43	1425	12/23/81	D (NPR1)	16.2	0.004
44	1725	09/01/81	D (NPR1)	20.5	0.004
45	1759	11/04/81	U-ELK.	.	0.004
46	3818	04/25/90	U-CR	.	0.004
47	4073	05/09/90	U (NPR1)	27.3	0.004
48	4385#2	12/12/90	D (NPR2)	48.1	0.004
49	4640	08/22/90	D (NPR2)	50.7	0.004

OBS	FOX_ID	DATE	SITE	AVGDIST	LU
50	4654	12/07/90	D (NPR1)	17.9	0.004
51	4682	08/16/90	D (NPR2)	26.0	0.004
52	4704	12/15/90	D (NPR2)	25.6	0.004
53	1324	09/02/81	D (NPR1)	21.9	0.003
54	1345	12/22/81	U (NPR1)	13.8	0.003
55	136	12/15/81	U (NPR1)	3.1	0.003
56	1408	12/23/81	D (NPR1)	21.4	0.003
57	1423	12/23/81	D (NPR1)	16.2	0.003
58	1611	12/22/81	D (NPR1)	17.9	0.003
59	3684	08/23/90	D (NPR2)	50.7	0.003
60	3784#2	11/28/90	U (NPR1)	2.6	0.003
61	4663#2	12/11/90		.	0.003
62	3180	12/15/90	D (NPR2)	31.3	0.002
63	3989	12/06/90	D (NPR1)	24.0	0.002
64	4373#2	08/16/90	D (NPR1)	17.6	0.002
65	4380#2	12/18/90	U (NPR1)	6.1	0.002
66	1314	12/18/81	U (NPR1)	7.0	-.001
67	1326	01/06/82	D (NPR1)	21.9	-.001
68	1736	09/03/81	D (NPR1)	21.4	-.001
69	1745	09/01/81	U (NPR1)	13.7	-.001
70	1776	12/15/81	U (NPR1)	5.7	-.001
71	2063	08/03/82	D (NPR1)	17.6	-.001
72	2065	08/03/82	D (NPR1)	17.6	-.001
73	3290	07/25/90	U (NPR1)	3.0	-.001
74	3612	04/26/90	U (NPR1)	.	-.001
75	3700	12/12/90	D (NPR2)	41.8	-.001
76	3784#1	08/03/90	U (NPR1)	3.7	-.001
77	3792	08/24/90	D (NPR2)	28.9	-.001
78	3883	08/01/90	U-CR	.	-.001
79	4025	07/25/90	U (NPR1)	3.3	-.001
80	4106	07/31/90	U-CR	.	-.001
81	4304	07/25/90	U (NPR1)	16.4	-.001
82	4306	08/01/90	U (NPR1)	4.5	-.001
83	4307	08/03/90		.	-.001
84	4313	07/25/90	U (NPR1)	12.3	-.001
85	4326	08/07/90		.	-.001
86	4335	12/14/90		.	-.001
87	4343	12/15/90	D (NPR2)	27.7	-.001
88	4353	07/31/90	U (NPR1)	.	-.001
89	4355	08/01/90	U (NPR1)	1.0	-.001
90	4373#1	05/09/90	D (NPR1)	17.6	-.001
91	4380#1	08/09/90	U (NPR1)	10.3	-.001
92	4626	07/24/90	U (NPR1)	2.7	-.001
93	4703	12/13/90	D (NPR2)	26.6	-.001

OBS	FOX_ID	DATE	SITE	AVGDIST	MG
1	3893	06/12/90	U-CR	.	660
2	1318	12/29/81	D (NPR1)	17.4	640
3	3845	04/26/90	U-CR	.	560
4	1350	01/08/82	D (NPR1)	26.0	500
5	3589	05/10/90	U-CR	.	460
6	1326	01/06/82	D (NPR1)	21.9	429
7	1757	11/04/81	U-ELK.	.	410
8	1771	11/04/81	U-ELK.	.	410
9	3713	11/29/90		.	390
10	1320	12/23/81	U (NPR1)	17.7	381
11	3562	06/16/90	D (NPR2)	34.6	360
12	3806	08/31/90	U-CR	.	360
13	1348#1	12/22/81	D (NPR1)	17.6	350
14	1681	09/01/81	D (NPR1)	18.5	350
15	1761	11/04/81	U-ELK.	.	350
16	4328	08/22/90	D (NPR2)	37.4	330
17	1424	12/22/81	D (NPR1)	18.0	320
18	4385#2	12/12/90	D (NPR2)	48.1	320
19	1304	12/29/81	U (NPR1)	3.4	310
20	3399	10/05/90	U-CR	.	300
21	3727	10/12/90	U-CR	.	300
22	1345	12/22/81	U (NPR1)	13.8	299
23	1419	11/19/81	D (NPR1)	25.3	290
24	1425	12/23/81	D (NPR1)	16.2	280
25	1784	12/23/83	U (NPR1)	14.1	276
26	1756	11/04/81	U-ELK.	.	270
27	1324	09/02/81	D (NPR1)	21.9	252
28	1309	11/19/81	D (NPR1)	19.3	250
29	1733	09/02/81	D (NPR1)	21.5	250
30	1758	11/04/81	U-ELK.	.	250
31	1759	11/04/81	U-ELK.	.	250
32	3819	04/25/90	U-CR	.	250
33	3895	10/19/90	U-CR	.	250
34	3212	08/22/90	U-CR	.	240
35	3590	05/09/90	U-CR	.	240
36	3784#2	11/28/90	U (NPR1)	2.6	240
37	3868	10/02/90	U-CR	.	240
38	3808	08/08/90	U-CR	.	230
39	3810	08/02/90	U-CR	.	220
40	4640	08/22/90	D (NPR2)	50.7	220
41	2065	08/03/82	D (NPR1)	17.6	210
42	3250	07/27/90	U (NPR1)	3.0	210
43	3684	08/23/90	D (NPR2)	50.7	210
44	3859	08/03/90	U-CR	.	210
45	125	12/22/81	U (NPR1)	3.0	203
46	1611	12/22/81	D (NPR1)	17.9	200
47	4704	12/15/90	D (NPR2)	25.6	200
48	1408	12/23/81	D (NPR1)	21.4	196
49	3393	09/19/90	U-CR	.	190

OBS	FOX_ID	DATE	SITE	AVGDIST	MG
50	4073	05/09/90	U (NPR1)	27.3	180
51	4654	12/07/90	D (NPR1)	17.9	180
52	1725	09/01/81	D (NPR1)	20.5	170
53	1745	09/01/81	U (NPR1)	13.7	170
54	3884	11/29/90	U-CR	.	170
55	4343	12/15/90	D (NPR2)	27.7	170
56	4703	12/13/90	D (NPR2)	26.6	170
57	3612	04/26/90	U (NPR1)	.	160
58	3883	08/01/90	U-CR	.	150
59	3989	12/06/90	D (NPR1)	24.0	150
60	4106	07/31/90	U-CR	.	150
61	4335	12/14/90		.	150
62	3792	08/24/90	D (NPR2)	28.9	140
63	4307	08/03/90		.	140
64	4663#2	12/11/90		.	140
65	3700	12/12/90	D (NPR2)	41.8	130
66	3818	04/25/90	U-CR	.	130
67	4380#2	12/18/90	U (NPR1)	6.1	130
68	1314	12/18/81	U (NPR1)	7.0	121
69	1644	08/25/81	U (NPR1)	13.7	120
70	3784#1	08/03/90	U (NPR1)	3.7	120
71	4380#1	08/09/90	U (NPR1)	10.3	120
72	1423	12/23/81	D (NPR1)	16.2	110
73	3290	07/25/90	U (NPR1)	3.0	100
74	4373#2	08/16/90	D (NPR1)	17.6	100
75	136	12/15/81	U (NPR1)	3.1	98
76	1776	12/15/81	U (NPR1)	5.7	63
77	1731	09/03/81	D (NPR1)	21.5	40
78	1348#2	08/03/82	D (NPR1)	17.6	-50
79	1736	09/03/81	D (NPR1)	21.4	-50
80	2063	08/03/82	D (NPR1)	17.6	-50
81	3180	12/15/90	D (NPR2)	31.3	-50
82	4025	07/25/90	U (NPR1)	3.3	-50
83	4304	07/25/90	U (NPR1)	16.4	-50
84	4306	08/01/90	U (NPR1)	4.5	-50
85	4313	07/25/90	U (NPR1)	12.3	-50
86	4326	08/07/90		.	-50
87	4353	07/31/90	U (NPR1)	.	-50
88	4355	08/01/90	U (NPR1)	1.0	-50
89	4373#1	05/09/90	D (NPR1)	17.6	-50
90	4616	12/05/90		.	-50
91	4626	07/24/90	U (NPR1)	2.7	-50
92	4682	08/16/90	D (NPR2)	26.0	-50
93	3817	08/28/90	U-CR	.	-300

OBS	FOX_ID	DATE	SITE	AVGDIST	MN
1	3806	08/31/90	U-CR	.	50.60
2	3893	06/12/90	U-CR	.	35.30
3	1350	01/08/82	D (NPR1)	26.0	31.70
4	4385#2	12/12/90	D (NPR2)	48.1	27.70
5	4616	12/05/90		.	21.60
6	3612	04/26/90	U (NPR1)	.	20.30
7	4328	08/22/90	D (NPR2)	37.4	19.30
8	1326	01/06/82	D (NPR1)	21.9	16.60
9	3684	08/23/90	D (NPR2)	50.7	15.30
10	3845	04/26/90	U-CR	.	14.00
11	3700	12/12/90	D (NPR2)	41.8	13.80
12	3589	05/10/90	U-CR	.	12.80
13	3727	10/12/90	U-CR	.	11.30
14	3399	10/05/90	U-CR	.	10.80
15	1681	09/01/81	D (NPR1)	18.5	10.50
16	1320	12/23/81	U (NPR1)	17.7	10.40
17	1348#1	12/22/81	D (NPR1)	17.6	10.30
18	1408	12/23/81	D (NPR1)	21.4	10.10
19	3212	08/22/90	U-CR	.	10.10
20	3562	06/16/90	D (NPR2)	34.6	10.10
21	1324	09/02/81	D (NPR1)	21.9	10.00
22	1345	12/22/81	U (NPR1)	13.8	9.90
23	3895	10/19/90	U-CR	.	9.60
24	1757	11/04/81	U-ELK.	.	9.42
25	1731	09/03/81	D (NPR1)	21.5	9.21
26	3713	11/29/90		.	9.19
27	3792	08/24/90	D (NPR2)	28.9	8.78
28	1304	12/29/81	U (NPR1)	3.4	8.68
29	3819	04/25/90	U-CR	.	8.51
30	4343	12/15/90	D (NPR2)	27.7	8.42
31	3818	04/25/90	U-CR	.	8.25
32	1419	11/19/81	D (NPR1)	25.3	8.11
33	1309	11/19/81	D (NPR1)	19.3	7.98
34	1771	11/04/81	U-ELK.	.	7.98
35	1733	09/02/81	D (NPR1)	21.5	7.90
36	4704	12/15/90	D (NPR2)	25.6	7.82
37	3883	08/01/90	U-CR	.	7.62
38	3810	08/02/90	U-CR	.	7.14
39	3859	08/03/90	U-CR	.	6.98
40	1761	11/04/81	U-ELK.	.	6.82
41	3590	05/09/90	U-CR	.	6.74
42	3784#2	11/28/90	U (NPR1)	2.6	6.66
43	1424	12/22/81	D (NPR1)	18.0	6.60
44	2065	08/03/82	D (NPR1)	17.6	6.50
45	4654	12/07/90	D (NPR1)	17.9	6.46
46	1425	12/23/81	D (NPR1)	16.2	6.43
47	1736	09/03/81	D (NPR1)	21.4	6.36
48	3868	10/02/90	U-CR	.	6.34
49	3989	12/06/90	D (NPR1)	24.0	5.89

OBS	FOX_ID	DATE	SITE	AVGDIST	MN
50	1756	11/04/81	U-ELK.	.	5.84
51	3884	11/29/90	U-CR	.	5.82
52	4073	05/09/90	U (NPR1)	27.3	5.69
53	1725	09/01/81	D (NPR1)	20.5	5.61
54	3393	09/19/90	U-CR	.	5.61
55	1758	11/04/81	U-ELK.	.	5.37
56	3784#1	08/03/90	U (NPR1)	3.7	5.26
57	3817	08/28/90	U-CR	.	5.26
58	1759	11/04/81	U-ELK.	.	5.22
59	4373#2	08/16/90	D (NPR1)	17.6	5.17
60	1644	08/25/81	U (NPR1)	13.7	5.13
61	3250	07/27/90	U (NPR1)	3.0	5.13
62	125	12/22/81	U (NPR1)	3.0	4.90
63	3290	07/25/90	U (NPR1)	3.0	4.72
64	1784	12/23/83	U (NPR1)	14.1	4.70
65	1611	12/22/81	D (NPR1)	17.9	4.66
66	4353	07/31/90	U (NPR1)	.	4.65
67	3808	08/08/90	U-CR	.	4.57
68	4307	08/03/90		.	4.10
69	4703	12/13/90	D (NPR2)	26.6	4.09
70	1745	09/01/81	U (NPR1)	13.7	3.98
71	4106	07/31/90	U-CR	.	3.96
72	4313	07/25/90	U (NPR1)	12.3	3.83
73	1776	12/15/81	U (NPR1)	5.7	3.60
74	136	12/15/81	U (NPR1)	3.1	3.40
75	1314	12/18/81	U (NPR1)	7.0	3.30
76	1423	12/23/81	D (NPR1)	16.2	3.26
77	4373#1	05/09/90	D (NPR1)	17.6	3.25
78	2063	08/03/82	D (NPR1)	17.6	3.17
79	4335	12/14/90		.	3.03
80	4663#2	12/11/90		.	2.82
81	4380#2	12/18/90	U (NPR1)	6.1	2.76
82	1318	12/29/81	D (NPR1)	17.4	2.67
83	4640	08/22/90	D (NPR2)	50.7	2.53
84	3180	12/15/90	D (NPR2)	31.3	2.20
85	4682	08/16/90	D (NPR2)	26.0	2.13
86	1348#2	08/03/82	D (NPR1)	17.6	2.10
87	4326	08/07/90		.	1.74
88	4355	08/01/90	U (NPR1)	1.0	1.63
89	4306	08/01/90	U (NPR1)	4.5	1.48
90	4626	07/24/90	U (NPR1)	2.7	1.25
91	4380#1	08/09/90	U (NPR1)	10.3	1.24
92	4304	07/25/90	U (NPR1)	16.4	1.16
93	4025	07/25/90	U (NPR1)	3.3	0.95

OBS	FOX_ID	DATE	SITE	AVGDIST	MO
1	1776	12/15/81	U (NPR1)	5.7	12.00
2	1326	01/06/82	D (NPR1)	21.9	6.00
3	3883	08/01/90	U-CR	.	1.20
4	3727	10/12/90	U-CR	.	0.97
5	3868	10/02/90	U-CR	.	0.70
6	3884	11/29/90	U-CR	.	0.70
7	3806	08/31/90	U-CR	.	0.67
8	1350	01/08/82	D (NPR1)	26.0	0.61
9	2065	08/03/82	D (NPR1)	17.6	0.54
10	1309	11/19/81	D (NPR1)	19.3	0.50
11	3845	04/26/90	U-CR	.	0.44
12	4704	12/15/90	D (NPR2)	25.6	0.42
13	1736	09/03/81	D (NPR1)	21.4	0.41
14	3612	04/26/90	U (NPR1)	.	0.41
15	3893	06/12/90	U-CR	.	0.40
16	1348#1	12/22/81	D (NPR1)	17.6	0.35
17	3810	08/02/90	U-CR	.	0.35
18	4640	08/22/90	D (NPR2)	50.7	0.35
19	3590	05/09/90	U-CR	.	0.34
20	3819	04/25/90	U-CR	.	0.34
21	1419	11/19/81	D (NPR1)	25.3	0.30
22	3393	09/19/90	U-CR	.	0.30
23	3713	11/29/90		.	0.29
24	1318	12/29/81	D (NPR1)	17.4	0.27
25	3895	10/19/90	U-CR	.	0.27
26	3562	06/16/90	D (NPR2)	34.6	0.26
27	3700	12/12/90	D (NPR2)	41.8	0.25
28	1758	11/04/81	U-ELK.	.	0.23
29	3818	04/25/90	U-CR	.	0.23
30	1731	09/03/81	D (NPR1)	21.5	0.21
31	3212	08/22/90	U-CR	.	0.21
32	3589	05/10/90	U-CR	.	0.21
33	4373#1	05/09/90	D (NPR1)	17.6	0.21
34	1757	11/04/81	U-ELK.	.	0.19
35	1611	12/22/81	D (NPR1)	17.9	0.17
36	1761	11/04/81	U-ELK.	.	0.17
37	1784	12/23/83	U (NPR1)	14.1	0.17
38	3859	08/03/90	U-CR	.	0.17
39	3399	10/05/90	U-CR	.	0.16
40	4343	12/15/90	D (NPR2)	27.7	0.16
41	1423	12/23/81	D (NPR1)	16.2	0.15
42	1681	09/01/81	D (NPR1)	18.5	0.15
43	1771	11/04/81	U-ELK.	.	0.14
44	1756	11/04/81	U-ELK.	.	0.13
45	4328	08/22/90	D (NPR2)	37.4	0.13
46	1304	12/29/81	U (NPR1)	3.4	0.12
47	1425	12/23/81	D (NPR1)	16.2	0.12
48	1320	12/23/81	U (NPR1)	17.7	0.11
49	3808	08/08/90	U-CR	.	0.10

OBS	FOX_ID	DATE	SITE	AVGDIST	MO
50	4073	05/09/90	U (NPR1)	27.3	0.10
51	4373#2	08/16/90	D (NPR1)	17.6	0.10
52	1324	09/02/81	D (NPR1)	21.9	0.09
53	1345	12/22/81	U (NPR1)	13.8	0.09
54	1314	12/18/81	U (NPR1)	7.0	0.08
55	3784#1	08/03/90	U (NPR1)	3.7	0.08
56	125	12/22/81	U (NPR1)	3.0	0.07
57	1644	08/25/81	U (NPR1)	13.7	0.07
58	4335	12/14/90		.	0.07
59	4380#2	12/18/90	U (NPR1)	6.1	0.07
60	1745	09/01/81	U (NPR1)	13.7	0.05
61	3784#2	11/28/90	U (NPR1)	2.6	0.05
62	1348#2	08/03/82	D (NPR1)	17.6	-0.03
63	1424	12/22/81	D (NPR1)	18.0	-0.03
64	1725	09/01/81	D (NPR1)	20.5	-0.03
65	1759	11/04/81	U-ELK.	.	-0.03
66	3180	12/15/90	D (NPR2)	31.3	-0.03
67	3792	08/24/90	D (NPR2)	28.9	-0.03
68	3989	12/06/90	D (NPR1)	24.0	-0.03
69	4025	07/25/90	U (NPR1)	3.3	-0.03
70	4304	07/25/90	U (NPR1)	16.4	-0.03
71	4306	08/01/90	U (NPR1)	4.5	-0.03
72	4307	08/03/90		.	-0.03
73	4313	07/25/90	U (NPR1)	12.3	-0.03
74	4703	12/13/90	D (NPR2)	26.6	-0.03
75	3290	07/25/90	U (NPR1)	3.0	-0.04
76	3684	08/23/90	D (NPR2)	50.7	-0.04
77	4682	08/16/90	D (NPR2)	26.0	-0.04
78	136	12/15/81	U (NPR1)	3.1	-0.05
79	1408	12/23/81	D (NPR1)	21.4	-0.05
80	1733	09/02/81	D (NPR1)	21.5	-0.05
81	3250	07/27/90	U (NPR1)	3.0	-0.05
82	4326	08/07/90		.	-0.05
83	4353	07/31/90	U (NPR1)	.	-0.05
84	4355	08/01/90	U (NPR1)	1.0	-0.05
85	4380#1	08/09/90	U (NPR1)	10.3	-0.05
86	4385#2	12/12/90	D (NPR2)	48.1	-0.05
87	4616	12/05/90		.	-0.05
88	4654	12/07/90	D (NPR1)	17.9	-0.05
89	4663#2	12/11/90		.	-0.05
90	4626	07/24/90	U (NPR1)	2.7	-0.06
91	2063	08/03/82	D (NPR1)	17.6	-0.08
92	4106	07/31/90	U-CR	.	-0.16
93	3817	08/28/90	U-CR	.	-0.22

OBS	FOX_ID	DATE	SITE	AVGDIST	NA
1	3784#2	11/28/90	U (NPR1)	2.6	212.0
2	3727	10/12/90	U-CR	.	208.0
3	3895	10/19/90	U-CR	.	199.0
4	3845	04/26/90	U-CR	.	194.0
5	3589	05/10/90	U-CR	.	187.0
6	1757	11/04/81	U-ELK.	.	180.0
7	3884	11/29/90	U-CR	.	160.0
8	1771	11/04/81	U-ELK.	.	158.0
9	1318	12/29/81	D (NPR1)	17.4	155.0
10	1731	09/03/81	D (NPR1)	21.5	130.0
11	3212	08/22/90	U-CR	.	130.0
12	3868	10/02/90	U-CR	.	129.0
13	3399	10/05/90	U-CR	.	127.0
14	1320	12/23/81	U (NPR1)	17.7	109.0
15	1756	11/04/81	U-ELK.	.	103.0
16	3819	04/25/90	U-CR	.	103.0
17	1348#1	12/22/81	D (NPR1)	17.6	99.0
18	3562	06/16/90	D (NPR2)	34.6	98.0
19	1761	11/04/81	U-ELK.	.	97.0
20	3806	08/31/90	U-CR	.	95.8
21	4380#1	08/09/90	U (NPR1)	10.3	93.0
22	1350	01/08/82	D (NPR1)	26.0	92.0
23	4328	08/22/90	D (NPR2)	37.4	92.0
24	2065	08/03/82	D (NPR1)	17.6	89.0
25	1681	09/01/81	D (NPR1)	18.5	87.0
26	3684	08/23/90	D (NPR2)	50.7	87.0
27	1784	12/23/83	U (NPR1)	14.1	85.5
28	1736	09/03/81	D (NPR1)	21.4	79.0
29	1326	01/06/82	D (NPR1)	21.9	78.8
30	1424	12/22/81	D (NPR1)	18.0	77.0
31	1758	11/04/81	U-ELK.	.	76.0
32	1759	11/04/81	U-ELK.	.	76.0
33	4385#2	12/12/90	D (NPR2)	48.1	76.0
34	3393	09/19/90	U-CR	.	75.8
35	1733	09/02/81	D (NPR1)	21.5	72.0
36	3808	08/08/90	U-CR	.	71.4
37	1425	12/23/81	D (NPR1)	16.2	68.0
38	3859	08/03/90	U-CR	.	66.3
39	4704	12/15/90	D (NPR2)	25.6	64.0
40	1419	11/19/81	D (NPR1)	25.3	62.0
41	1725	09/01/81	D (NPR1)	20.5	59.0
42	1324	09/02/81	D (NPR1)	21.9	57.6
43	1304	12/29/81	U (NPR1)	3.4	57.0
44	2063	08/03/82	D (NPR1)	17.6	57.0
45	3713	11/29/90		.	56.0
46	3810	08/02/90	U-CR	.	53.1
47	1611	12/22/81	D (NPR1)	17.9	53.0
48	3250	07/27/90	U (NPR1)	3.0	53.0
49	4654	12/07/90	D (NPR1)	17.9	51.0

OBS	FOX_ID	DATE	SITE	AVGDIST	NA
50	1309	11/19/81	D (NPR1)	19.3	50.0
51	1345	12/22/81	U (NPR1)	13.8	49.5
52	4326	08/07/90		.	45.0
53	4616	12/05/90		.	45.0
54	1348#2	08/03/82	D (NPR1)	17.6	43.0
55	4343	12/15/90	D (NPR2)	27.7	43.0
56	3792	08/24/90	D (NPR2)	28.9	42.0
57	3989	12/06/90	D (NPR1)	24.0	40.0
58	3590	05/09/90	U-CR	.	39.5
59	4106	07/31/90	U-CR	.	39.1
60	125	12/22/81	U (NPR1)	3.0	38.0
61	1644	08/25/81	U (NPR1)	13.7	36.0
62	1745	09/01/81	U (NPR1)	13.7	35.0
63	3818	04/25/90	U-CR	.	33.5
64	3893	06/12/90	U-CR	.	33.0
65	3700	12/12/90	D (NPR2)	41.8	32.0
66	3883	08/01/90	U-CR	.	31.5
67	3817	08/28/90	U-CR	.	31.0
68	4703	12/13/90	D (NPR2)	26.6	30.0
69	1408	12/23/81	D (NPR1)	21.4	29.8
70	3180	12/15/90	D (NPR2)	31.3	28.0
71	4373#1	05/09/90	D (NPR1)	17.6	27.0
72	4355	08/01/90	U (NPR1)	1.0	26.0
73	4380#2	12/18/90	U (NPR1)	6.1	25.0
74	4073	05/09/90	U (NPR1)	27.3	24.0
75	4353	07/31/90	U (NPR1)	.	22.0
76	1423	12/23/81	D (NPR1)	16.2	21.0
77	3612	04/26/90	U (NPR1)	.	21.0
78	3784#1	08/03/90	U (NPR1)	3.7	21.0
79	4335	12/14/90		.	21.0
80	1776	12/15/81	U (NPR1)	5.7	19.4
81	136	12/15/81	U (NPR1)	3.1	19.1
82	3290	07/25/90	U (NPR1)	3.0	19.0
83	4373#2	08/16/90	D (NPR1)	17.6	19.0
84	1314	12/18/81	U (NPR1)	7.0	18.9
85	4663#2	12/11/90		.	14.8
86	4307	08/03/90		.	14.0
87	4626	07/24/90	U (NPR1)	2.7	14.0
88	4682	08/16/90	D (NPR2)	26.0	11.4
89	4313	07/25/90	U (NPR1)	12.3	10.0
90	4306	08/01/90	U (NPR1)	4.5	8.2
91	4025	07/25/90	U (NPR1)	3.3	7.4
92	4640	08/22/90	D (NPR2)	50.7	6.6
93	4304	07/25/90	U (NPR1)	16.4	4.1

OBS	FOX_ID	DATE	SITE	AVGDIST	ND
1	3589	05/10/90	U-CR	.	1.5
2	3893	06/12/90	U-CR	.	1.2
3	3895	10/19/90	U-CR	.	1.1
4	1318	12/29/81	D (NPR1)	17.4	1.0
5	1348#2	08/03/82	D (NPR1)	17.6	1.0
6	1350	01/08/82	D (NPR1)	26.0	1.0
7	1326	01/06/82	D (NPR1)	21.9	0.9
8	3727	10/12/90	U-CR	.	0.9
9	3845	04/26/90	U-CR	.	0.9
10	1309	11/19/81	D (NPR1)	19.3	0.7
11	1757	11/04/81	U-ELK.	.	0.7
12	3399	10/05/90	U-CR	.	0.7
13	3808	08/08/90	U-CR	.	0.7
14	3819	04/25/90	U-CR	.	0.7
15	1345	12/22/81	U (NPR1)	13.8	0.6
16	1733	09/02/81	D (NPR1)	21.5	0.6
17	1771	11/04/81	U-ELK.	.	0.6
18	3590	05/09/90	U-CR	.	0.6
19	3818	04/25/90	U-CR	.	0.6
20	3859	08/03/90	U-CR	.	0.6
21	1320	12/23/81	U (NPR1)	17.7	0.5
22	1725	09/01/81	D (NPR1)	20.5	0.5
23	1756	11/04/81	U-ELK.	.	0.5
24	1761	11/04/81	U-ELK.	.	0.5
25	1776	12/15/81	U (NPR1)	5.7	0.5
26	1784	12/23/83	U (NPR1)	14.1	0.5
27	3713	11/29/90		.	0.5
28	3806	08/31/90	U-CR	.	0.5
29	125	12/22/81	U (NPR1)	3.0	-0.3
30	1314	12/18/81	U (NPR1)	7.0	-0.3
31	1324	09/02/81	D (NPR1)	21.9	-0.3
32	136	12/15/81	U (NPR1)	3.1	-0.3
33	1408	12/23/81	D (NPR1)	21.4	-0.3
34	1304	12/29/81	U (NPR1)	3.4	-0.5
35	1348#1	12/22/81	D (NPR1)	17.6	-0.5
36	1419	11/19/81	D (NPR1)	25.3	-0.5
37	1423	12/23/81	D (NPR1)	16.2	-0.5
38	1424	12/22/81	D (NPR1)	18.0	-0.5
39	1425	12/23/81	D (NPR1)	16.2	-0.5
40	1611	12/22/81	D (NPR1)	17.9	-0.5
41	1644	08/25/81	U (NPR1)	13.7	-0.5
42	1681	09/01/81	D (NPR1)	18.5	-0.5
43	1731	09/03/81	D (NPR1)	21.5	-0.5
44	1736	09/03/81	D (NPR1)	21.4	-0.5
45	1745	09/01/81	U (NPR1)	13.7	-0.5
46	1758	11/04/81	U-ELK.	.	-0.5
47	1759	11/04/81	U-ELK.	.	-0.5
48	2063	08/03/82	D (NPR1)	17.6	-0.5
49	2065	08/03/82	D (NPR1)	17.6	-0.5

OBS	FOX_ID	DATE	SITE	AVGDIST	ND
50	3180	12/15/90	D (NPR2)	31.3	-0.5
51	3212	08/22/90	U-CR	.	-0.5
52	3250	07/27/90	U (NPR1)	3.0	-0.5
53	3290	07/25/90	U (NPR1)	3.0	-0.5
54	3393	09/19/90	U-CR	.	-0.5
55	3562	06/16/90	D (NPR2)	34.6	-0.5
56	3612	04/26/90	U (NPR1)	.	-0.5
57	3684	08/23/90	D (NPR2)	50.7	-0.5
58	3700	12/12/90	D (NPR2)	41.8	-0.5
59	3784#1	08/03/90	U (NPR1)	3.7	-0.5
60	3784#2	11/28/90	U (NPR1)	2.6	-0.5
61	3792	08/24/90	D (NPR2)	28.9	-0.5
62	3810	08/02/90	U-CR	.	-0.5
63	3868	10/02/90	U-CR	.	-0.5
64	3883	08/01/90	U-CR	.	-0.5
65	3884	11/29/90	U-CR	.	-0.5
66	3989	12/06/90	D (NPR1)	24.0	-0.5
67	4025	07/25/90	U (NPR1)	3.3	-0.5
68	4073	05/09/90	U (NPR1)	27.3	-0.5
69	4106	07/31/90	U-CR	.	-0.5
70	4304	07/25/90	U (NPR1)	16.4	-0.5
71	4306	08/01/90	U (NPR1)	4.5	-0.5
72	4307	08/03/90		.	-0.5
73	4313	07/25/90	U (NPR1)	12.3	-0.5
74	4326	08/07/90		.	-0.5
75	4328	08/22/90	D (NPR2)	37.4	-0.5
76	4335	12/14/90		.	-0.5
77	4343	12/15/90	D (NPR2)	27.7	-0.5
78	4353	07/31/90	U (NPR1)	.	-0.5
79	4355	08/01/90	U (NPR1)	1.0	-0.5
80	4373#1	05/09/90	D (NPR1)	17.6	-0.5
81	4373#2	08/16/90	D (NPR1)	17.6	-0.5
82	4380#1	08/09/90	U (NPR1)	10.3	-0.5
83	4380#2	12/18/90	U (NPR1)	6.1	-0.5
84	4385#2	12/12/90	D (NPR2)	48.1	-0.5
85	4616	12/05/90		.	-0.5
86	4626	07/24/90	U (NPR1)	2.7	-0.5
87	4640	08/22/90	D (NPR2)	50.7	-0.5
88	4654	12/07/90	D (NPR1)	17.9	-0.5
89	4663#2	12/11/90		.	-0.5
90	4682	08/16/90	D (NPR2)	26.0	-0.5
91	4703	12/13/90	D (NPR2)	26.6	-0.5
92	4704	12/15/90	D (NPR2)	25.6	-0.5
93	3817	08/28/90	U-CR	.	-0.6

OBS	FOX_ID	DATE	SITE	AVGDIST	NI
1	4328	08/22/90	D (NPR2)	37.4	10
2	3845	04/26/90	U-CR	.	8
3	4073	05/09/90	U (NPR1)	27.3	7
4	3727	10/12/90	U-CR	.	6
5	1756	11/04/81	U-ELK.	.	5
6	1758	11/04/81	U-ELK.	.	5
7	3212	08/22/90	U-CR	.	5
8	3868	10/02/90	U-CR	.	5
9	3399	10/05/90	U-CR	.	4
10	3859	08/03/90	U-CR	.	4
11	3895	10/19/90	U-CR	.	4
12	4385#2	12/12/90	D (NPR2)	48.1	4
13	1345	12/22/81	U (NPR1)	13.8	1
14	125	12/22/81	U (NPR1)	3.0	-1
15	1309	11/19/81	D (NPR1)	19.3	-1
16	1314	12/18/8.	U (NPR1)	7.0	-1
17	1318	12/29/81	D (NPR1)	17.4	-1
18	1320	12/23/81	U (NPR1)	17.7	-1
19	1324	09/02/81	D (NPR1)	21.9	-1
20	1326	01/06/82	D (NPR1)	21.9	-1
21	1350	01/08/82	D (NPR1)	26.0	-1
22	136	12/15/81	U (NPR1)	3.1	-1
23	1408	12/23/81	D (NPR1)	21.4	-1
24	1423	12/23/81	D (NPR1)	16.2	-1
25	1424	12/22/81	D (NPR1)	18.0	-1
26	1644	08/25/81	U (NPR1)	13.7	-1
27	1725	09/01/81	D (NPR1)	20.5	-1
28	1757	11/04/81	U-ELK.	.	-1
29	1759	11/04/81	U-ELK.	.	-1
30	1761	11/04/81	U-ELK.	.	-1
31	1771	11/04/81	U-ELK.	.	-1
32	1776	12/15/81	U (NPR1)	5.7	-1
33	1784	12/23/83	U (NPR1)	14.1	-1
34	3180	12/15/90	D (NPR2)	31.3	-1
35	3250	07/27/90	U (NPR1)	3.0	-1
36	3290	07/25/90	U (NPR1)	3.0	-1
37	3393	09/19/90	U-CR	.	-1
38	3589	05/10/90	U-CR	.	-1
39	3590	05/09/90	U-CR	.	-1
40	3612	04/26/90	U (NPR1)	.	-1
41	3684	08/23/90	D (NPR2)	50.7	-1
42	3700	12/12/90	D (NPR2)	41.8	-1
43	3713	11/29/90		.	-1
44	3784#1	08/03/90	U (NPR1)	3.7	-1
45	3784#2	11/28/90	U (NPR1)	2.6	-1
46	3806	08/31/90	U-CR	.	-1
47	3808	08/08/90	U-CR	.	-1
48	3810	08/02/90	U-CR	.	-1
49	3818	04/25/90	U-CR	.	-1

OBS	FOX_ID	DATE	SITE	AVGDIST	NI
50	3819	04/25/90	U-CR	.	-1
51	3883	08/01/90	U-CR	.	-1
52	3884	11/29/90	U-CR	.	-1
53	3989	12/06/90	D (NPR1)	24.0	-1
54	4025	07/25/90	U (NPR1)	3.3	-1
55	4335	12/14/90		.	-1
56	4343	12/15/90	D (NPR2)	27.7	-1
57	4373#2	08/16/90	D (NPR1)	17.6	-1
58	4654	12/07/90	D (NPR1)	17.9	-1
59	4682	08/16/90	D (NPR2)	26.0	-1
60	4703	12/13/90	D (NPR2)	26.6	-1
61	4704	12/15/90	D (NPR2)	25.6	-1
62	1304	12/29/81	U (NPR1)	3.4	-2
63	1419	11/19/81	D (NPR1)	25.3	-2
64	1425	12/23/81	D (NPR1)	16.2	-2
65	1611	12/22/81	D (NPR1)	17.9	-2
66	1681	09/01/81	D (NPR1)	18.5	-2
67	1731	09/03/81	D (NPR1)	21.5	-2
68	1733	09/02/81	D (NPR1)	21.5	-2
69	1745	09/01/81	U (NPR1)	13.7	-2
70	2063	08/03/82	D (NPR1)	17.6	-2
71	2065	08/03/82	D (NPR1)	17.6	-2
72	3792	08/24/90	D (NPR2)	28.9	-2
73	3893	06/12/90	U-CR	.	-2
74	4106	07/31/90	U-CR	.	-2
75	4304	07/25/90	U (NPR1)	16.4	-2
76	4306	08/01/90	U (NPR1)	4.5	-2
77	4307	08/03/90		.	-2
78	4313	07/25/90	U (NPR1)	12.3	-2
79	4326	08/07/90		.	-2
80	4353	07/31/90	U (NPR1)	.	-2
81	4373#1	05/09/90	D (NPR1)	17.6	-2
82	4616	12/05/90		.	-2
83	4626	07/24/90	U (NPR1)	2.7	-2
84	4640	08/22/90	D (NPR2)	50.7	-2
85	4663#2	12/11/90		.	-2
86	1348#1	12/22/81	D (NPR1)	17.6	-3
87	1348#2	08/03/82	D (NPR1)	17.6	-3
88	3562	06/16/90	D (NPR2)	34.6	-3
89	4355	08/01/90	U (NPR1)	1.0	-3
90	1736	09/03/81	D (NPR1)	21.4	-4
91	4380#2	12/18/90	U (NPR1)	6.1	-5
92	3817	08/28/90	U-CR	.	-6
93	4380#1	08/09/90	U (NPR1)	10.3	-9

OBS	FOX_ID	DATE	SITE	AVGDIST	RB
1	3589	05/10/90	U-CR	.	3.7
2	3895	10/19/90	U-CR	.	3.3
3	3893	06/12/90	U-CR	.	3.0
4	1318	12/29/81	D (NPR1)	17.4	2.9
5	3845	04/26/90	U-CR	.	2.7
6	3727	10/12/90	U-CR	.	2.5
7	3810	08/02/90	U-CR	.	2.5
8	2065	08/03/82	D (NPR1)	17.6	2.4
9	1757	11/04/81	U-ELK.	.	2.1
10	1681	09/01/81	D (NPR1)	18.5	2.0
11	1348#1	12/22/81	D (NPR1)	17.6	1.8
12	1424	12/22/81	D (NPR1)	18.0	1.8
13	1771	11/04/81	U-ELK.	.	1.8
14	3399	10/05/90	U-CR	.	1.8
15	3806	08/31/90	U-CR	.	1.8
16	3819	04/25/90	U-CR	.	1.8
17	125	12/22/81	U (NPR1)	3.0	1.6
18	3212	08/22/90	U-CR	.	1.6
19	3393	09/19/90	U-CR	.	1.6
20	3868	10/02/90	U-CR	.	1.6
21	3590	05/09/90	U-CR	.	1.5
22	4704	12/15/90	D (NPR2)	25.6	1.5
23	1761	11/04/81	U-ELK.	.	1.4
24	3884	11/29/90	U-CR	.	1.4
25	1350	01/08/82	D (NPR1)	26.0	1.3
26	1756	11/04/81	U-ELK.	.	1.3
27	3713	11/29/90		.	1.3
28	3818	04/25/90	U-CR	.	1.3
29	1326	01/06/82	D (NPR1)	21.9	1.2
30	3859	08/03/90	U-CR	.	1.2
31	3883	08/01/90	U-CR	.	1.2
32	1309	11/19/81	D (NPR1)	19.3	1.1
33	1425	12/23/81	D (NPR1)	16.2	1.1
34	1733	09/02/81	D (NPR1)	21.5	1.1
35	1759	11/04/81	U-ELK.	.	1.1
36	4328	08/22/90	D (NPR2)	37.4	1.1
37	4703	12/13/90	D (NPR2)	26.6	1.1
38	1304	12/29/81	U (NPR1)	3.4	1.0
39	1320	12/23/81	U (NPR1)	17.7	1.0
40	3808	08/08/90	U-CR	.	1.0
41	1324	09/02/81	D (NPR1)	21.9	0.9
42	1731	09/03/81	D (NPR1)	21.5	0.9
43	1611	12/22/81	D (NPR1)	17.9	0.8
44	3250	07/27/90	U (NPR1)	3.0	0.8
45	1314	12/18/81	U (NPR1)	7.0	0.7
46	1644	08/25/81	U (NPR1)	13.7	0.7
47	1784	12/23/83	U (NPR1)	14.1	0.7
48	1419	11/19/81	D (NPR1)	25.3	0.6
49	1725	09/01/81	D (NPR1)	20.5	0.6

OBS	FOX_ID	DATE	SITE	AVGDIST	RB
50	3784#1	08/03/90	U (NPR1)	3.7	0.6
51	3784#2	11/28/90	U (NPR1)	2.6	0.6
52	3989	12/06/90	D (NPR1)	24.0	0.6
53	4654	12/07/90	D (NPR1)	17.9	0.6
54	1408	12/23/81	D (NPR1)	21.4	0.5
55	4335	12/14/90		.	0.4
56	1423	12/23/81	D (NPR1)	16.2	-0.3
57	1745	09/01/81	U (NPR1)	13.7	-0.3
58	1758	11/04/81	U-ELK.	.	-0.3
59	3180	12/15/90	D (NPR2)	31.3	-0.3
60	3290	07/25/90	U (NPR1)	3.0	-0.3
61	3562	06/16/90	D (NPR2)	34.6	-0.3
62	3612	04/26/90	U (NPR1)	.	-0.3
63	3684	08/23/90	D (NPR2)	50.7	-0.3
64	3700	12/12/90	D (NPR2)	41.8	-0.3
65	3792	08/24/90	D (NPR2)	28.9	-0.3
66	4025	07/25/90	U (NPR1)	3.3	-0.3
67	4073	05/09/90	U (NPR1)	27.3	-0.3
68	4106	07/31/90	U-CR	.	-0.3
69	4304	07/25/90	U (NPR1)	16.4	-0.3
70	4306	08/01/90	U (NPR1)	4.5	-0.3
71	4307	08/03/90		.	-0.3
72	4313	07/25/90	U (NPR1)	12.3	-0.3
73	4343	12/15/90	D (NPR2)	27.7	-0.3
74	4353	07/31/90	U (NPR1)	.	-0.3
75	4373#1	05/09/90	D (NPR1)	17.6	-0.3
76	4373#2	08/16/90	D (NPR1)	17.6	-0.3
77	4380#2	12/18/90	U (NPR1)	6.1	-0.3
78	4385#2	12/12/90	D (NPR2)	48.1	-0.3
79	4616	12/05/90		.	-0.3
80	4682	08/16/90	D (NPR2)	26.0	-0.3
81	1348#2	08/03/82	D (NPR1)	17.6	-0.4
82	4326	08/07/90		.	-0.4
83	4380#1	08/09/90	U (NPR1)	10.3	-0.4
84	4626	07/24/90	U (NPR1)	2.7	-0.4
85	4640	08/22/90	D (NPR2)	50.7	-0.4
86	4663#2	12/11/90		.	-0.4
87	1345	12/22/81	U (NPR1)	13.8	-0.5
88	136	12/15/81	U (NPR1)	3.1	-0.5
89	1776	12/15/81	U (NPR1)	5.7	-0.5
90	4355	08/01/90	U (NPR1)	1.0	-0.5
91	1736	09/03/81	D (NPR1)	21.4	-0.6
92	2063	08/03/82	D (NPR1)	17.6	-0.6
93	3817	08/28/90	U-CR	.	-1.3

OBS	FOX_ID	DATE	SITE	AVGDIST	RE
1	1304	12/29/81	U (NPR1)	3.4	-0.1
2	1309	11/19/81	D (NPR1)	19.3	-0.1
3	1318	12/29/81	D (NPR1)	17.4	-0.1
4	1348#1	12/22/81	D (NPR1)	17.6	-0.1
5	1348#2	08/03/82	D (NPR1)	17.6	-0.1
6	1350	01/08/82	D (NPR1)	26.0	-0.1
7	1419	11/19/81	D (NPR1)	25.3	-0.1
8	1423	12/23/81	D (NPR1)	16.2	-0.1
9	1424	12/22/81	D (NPR1)	18.0	-0.1
10	1425	12/23/81	D (NPR1)	16.2	-0.1
11	1611	12/22/81	D (NPR1)	17.9	-0.1
12	1644	08/25/81	U (NPR1)	13.7	-0.1
13	1681	09/01/81	D (NPR1)	18.5	-0.1
14	1725	09/01/81	D (NPR1)	20.5	-0.1
15	1731	09/03/81	D (NPR1)	21.5	-0.1
16	1733	09/02/81	D (NPR1)	21.5	-0.1
17	1736	09/03/81	D (NPR1)	21.4	-0.1
18	1745	09/01/81	U (NPR1)	13.7	-0.1
19	1756	11/04/81	U-ELK.	.	-0.1
20	1757	11/04/81	U-ELK.	.	-0.1
21	1758	11/04/81	U-ELK.	.	-0.1
22	1759	11/04/81	U-ELK.	.	-0.1
23	1761	11/04/81	U-ELK.	.	-0.1
24	1771	11/04/81	U-ELK.	.	-0.1
25	2063	08/03/82	D (NPR1)	17.6	-0.1
26	2065	08/03/82	D (NPR1)	17.6	-0.1
27	3180	12/15/90	D (NPR2)	31.3	-0.1
28	3212	08/22/90	U-CR	.	-0.1
29	3250	07/27/90	U (NPR1)	3.0	-0.1
30	3290	07/25/90	U (NPR1)	3.0	-0.1
31	3393	09/19/90	U-CR	.	-0.1
32	3399	10/05/90	U-CR	.	-0.1
33	3562	06/16/90	D (NPR2)	34.6	-0.1
34	3589	05/10/90	U-CR	.	-0.1
35	3590	05/09/90	U-CR	.	-0.1
36	3612	04/26/90	U (NPR1)	.	-0.1
37	3684	08/23/90	D (NPR2)	50.7	-0.1
38	3700	12/12/90	D (NPR2)	41.8	-0.1
39	3713	11/29/90		.	-0.1
40	3727	10/12/90	U-CR	.	-0.1
41	3784#1	08/03/90	U (NPR1)	3.7	-0.1
42	3784#2	11/28/90	U (NPR1)	2.6	-0.1
43	3792	08/24/90	D (NPR2)	28.9	-0.1
44	3806	08/31/90	U-CR	.	-0.1
45	3808	08/08/90	U-CR	.	-0.1
46	3810	08/02/90	U-CR	.	-0.1
47	3817	08/28/90	U-CR	.	-0.1
48	3818	04/25/90	U-CR	.	-0.1
49	3819	04/25/90	U-CR	.	-0.1

OBS	FOX_ID	DATE	SITE	AVGDIST	RE
50	3845	04/26/90	U-CR	.	-0.1
51	3859	08/03/90	U-CR	.	-0.1
52	3868	10/02/90	U-CR	.	-0.1
53	3883	08/01/90	U-CR	.	-0.1
54	3884	11/29/90	U-CR	.	-0.1
55	3893	06/12/90	U-CR	.	-0.1
56	3895	10/19/90	U-CR	.	-0.1
57	3989	12/06/90	D (NPR1)	24.0	-0.1
58	4025	07/25/90	U (NPR1)	3.3	-0.1
59	4073	05/09/90	U (NPR1)	27.3	-0.1
60	4106	07/31/90	U-CR	.	-0.1
61	4304	07/25/90	U (NPR1)	16.4	-0.1
62	4306	08/01/90	U (NPR1)	4.5	-0.1
63	4307	08/03/90		.	-0.1
64	4313	07/25/90	U (NPR1)	12.3	-0.1
65	4326	08/07/90		.	-0.1
66	4328	08/22/90	D (NPR2)	37.4	-0.1
67	4335	12/14/90		.	-0.1
68	4343	12/15/90	D (NPR2)	27.7	-0.1
69	4353	07/31/90	U (NPR1)	.	-0.1
70	4355	08/01/90	U (NPR1)	1.0	-0.1
71	4373#1	05/09/90	D (NPR1)	17.6	-0.1
72	4373#2	08/16/90	D (NPR1)	17.6	-0.1
73	4380#1	08/09/90	U (NPR1)	10.3	-0.1
74	4380#2	12/18/90	U (NPR1)	6.1	-0.1
75	4385#2	12/12/90	D (NPR2)	48.1	-0.1
76	4616	12/05/90		.	-0.1
77	4626	07/24/90	U (NPR1)	2.7	-0.1
78	4640	08/22/90	D (NPR2)	50.7	-0.1
79	4654	12/07/90	D (NPR1)	17.9	-0.1
80	4663#2	12/11/90		.	-0.1
81	4682	08/16/90	D (NPR2)	26.0	-0.1
82	4703	12/13/90	D (NPR2)	26.6	-0.1
83	4704	12/15/90	D (NPR2)	25.6	-0.1
84	125	12/22/81	U (NPR1)	3.0	.
85	1314	12/18/81	U (NPR1)	7.0	.
86	1320	12/23/81	U (NPR1)	17.7	.
87	1324	09/02/81	D (NPR1)	21.9	.
88	1326	01/06/82	D (NPR1)	21.9	.
89	1345	12/22/81	U (NPR1)	13.8	.
90	136	12/15/81	U (NPR1)	3.1	.
91	1408	12/23/81	D (NPR1)	21.4	.
92	1776	12/15/81	U (NPR1)	5.7	.
93	1784	12/23/83	U (NPR1)	14.1	.

OBS	FOX_ID	DATE	SITE	AVGDIST	S
1	136	12/15/81	U (NPR1)	3.1	22.7
2	1314	12/18/81	U (NPR1)	7.0	21.7
3	1324	09/02/81	D (NPR1)	21.9	21.6
4	1784	12/23/83	U (NPR1)	14.1	13.5
5	1345	12/22/81	U (NPR1)	13.8	12.9
6	1320	12/23/81	U (NPR1)	17.7	12.7
7	125	12/22/81	U (NPR1)	3.0	12.5
8	1408	12/23/81	D (NPR1)	21.4	11.8
9	1776	12/15/81	U (NPR1)	5.7	10.3
10	1326	01/06/82	D (NPR1)	21.9	9.3
11	1304	12/29/81	U (NPR1)	3.4	.
12	1309	11/19/81	D (NPR1)	19.3	.
13	1318	12/29/81	D (NPR1)	17.4	.
14	1348#1	12/22/81	D (NPR1)	17.6	.
15	1348#2	08/03/82	D (NPR1)	17.6	.
16	1350	01/08/82	D (NPR1)	26.0	.
17	1419	11/19/81	D (NPR1)	25.3	.
18	1423	12/23/81	D (NPR1)	16.2	.
19	1424	12/22/81	D (NPR1)	18.0	.
20	1425	12/23/81	D (NPR1)	16.2	.
21	1611	12/22/81	D (NPR1)	17.9	.
22	1644	08/25/81	U (NPR1)	13.7	.
23	1681	09/01/81	D (NPR1)	18.5	.
24	1725	09/01/81	D (NPR1)	20.5	.
25	1731	09/03/81	D (NPR1)	21.5	.
26	1733	09/02/81	D (NPR1)	21.5	.
27	1736	09/03/81	D (NPR1)	21.4	.
28	1745	09/01/81	U (NPR1)	13.7	.
29	1756	11/04/81	U-ELK.	.	.
30	1757	11/04/81	U-ELK.	.	.
31	1758	11/04/81	U-ELK.	.	.
32	1759	11/04/81	U-ELK.	.	.
33	1761	11/04/81	U-ELK.	.	.
34	1771	11/04/81	U-ELK.	.	.
35	2063	08/03/82	D (NPR1)	17.6	.
36	2065	08/03/82	D (NPR1)	17.6	.
37	3180	12/15/90	D (NPR2)	31.3	.
38	3212	08/22/90	U-CR	.	.
39	3250	07/27/90	U (NPR1)	3.0	.
40	3290	07/25/90	U (NPR1)	3.0	.
41	3393	09/19/90	U-CR	.	.
42	3399	10/05/90	U-CR	.	.
43	3562	06/16/90	D (NPR2)	34.6	.
44	3589	05/10/90	U-CR	.	.
45	3590	05/09/90	U-CR	.	.
46	3612	04/26/90	U (NPR1)	.	.
47	3684	08/23/90	D (NPR2)	50.7	.
48	3700	12/12/90	D (NPR2)	41.8	.
49	3713	11/29/90		.	.

OBS	FOX_ID	DATE	SITE	AVGDIST	S
50	3727	10/12/90	U-CR	.	.
51	3784#1	08/03/90	U (NPR1)	3.7	.
52	3784#2	11/28/90	U (NPR1)	2.6	.
53	3792	08/24/90	D (NPR2)	28.9	.
54	3806	08/31/90	U-CR	.	.
55	3808	08/08/90	U-CR	.	.
56	3810	08/02/90	U-CR	.	.
57	3817	08/28/90	U-CR	.	.
58	3818	04/25/90	U-CR	.	.
59	3819	04/25/90	U-CR	.	.
60	3845	04/26/90	U-CR	.	.
61	3859	08/03/90	U-CR	.	.
62	3868	10/02/90	U-CR	.	.
63	3883	08/01/90	U-CR	.	.
64	3884	11/29/90	U-CR	.	.
65	3893	06/12/90	U-CR	.	.
66	3895	10/19/90	U-CR	.	.
67	3989	12/06/90	D (NPR1)	24.0	.
68	4025	07/25/90	U (NPR1)	3.3	.
69	4073	05/09/90	U (NPR1)	27.3	.
70	4106	07/31/90	U-CR	.	.
71	4304	07/25/90	U (NPR1)	16.4	.
72	4306	08/01/90	U (NPR1)	4.5	.
73	4307	08/03/90		.	.
74	4313	07/25/90	U (NPR1)	12.3	.
75	4326	08/07/90		.	.
76	4328	08/22/90	D (NPR2)	37.4	.
77	4335	12/14/90		.	.
78	4343	12/15/90	D (NPR2)	27.7	.
79	4353	07/31/90	U (NPR1)	.	.
80	4355	08/01/90	U (NPR1)	1.0	.
81	4373#1	05/09/90	D (NPR1)	17.6	.
82	4373#2	08/16/90	D (NPR1)	17.6	.
83	4380#1	08/09/90	U (NPR1)	10.3	.
84	4380#2	12/18/90	U (NPR1)	6.1	.
85	4385#2	12/12/90	D (NPR2)	48.1	.
86	4616	12/05/90		.	.
87	4626	07/24/90	U (NPR1)	2.7	.
88	4640	08/22/90	D (NPR2)	50.7	.
89	4654	12/07/90	D (NPR1)	17.9	.
90	4663#2	12/11/90		.	.
91	4682	08/16/90	D (NPR2)	26.0	.
92	4703	12/13/90	D (NPR2)	26.6	.
93	4704	12/15/90	D (NPR2)	25.6	.

OBS	FOX_ID	DATE	SITE	AVGDIST	SB
1	1681	09/01/81	D (NPR1)	18.5	1.400
2	1408	12/23/81	D (NPR1)	21.4	0.620
3	3727	10/12/90	U-CR	.	0.600
4	3883	08/01/90	U-CR	.	0.550
5	4640	08/22/90	D (NPR2)	50.7	0.440
6	3868	10/02/90	U-CR	.	0.430
7	3562	06/16/90	D (NPR2)	34.6	0.400
8	3806	08/31/90	U-CR	.	0.330
9	3895	10/19/90	U-CR	.	0.270
10	3212	08/22/90	U-CR	.	0.240
11	3817	08/28/90	U-CR	.	0.230
12	3590	05/09/90	U-CR	.	0.180
13	2065	08/03/82	D (NPR1)	17.6	0.170
14	3589	05/10/90	U-CR	.	0.170
15	3845	04/26/90	U-CR	.	0.150
16	4373#1	05/09/90	D (NPR1)	17.6	0.150
17	4654	12/07/90	D (NPR1)	17.9	0.150
18	1304	12/29/81	U (NPR1)	3.4	0.140
19	3819	04/25/90	U-CR	.	0.140
20	3893	06/12/90	U-CR	.	0.140
21	4704	12/15/90	D (NPR2)	25.6	0.130
22	3684	08/23/90	D (NPR2)	50.7	0.120
23	3818	04/25/90	U-CR	.	0.120
24	3399	10/05/90	U-CR	.	0.110
25	4682	08/16/90	D (NPR2)	26.0	0.110
26	3700	12/12/90	D (NPR2)	41.8	0.100
27	3792	08/24/90	D (NPR2)	28.9	0.100
28	3808	08/08/90	U-CR	.	0.100
29	3884	11/29/90	U-CR	.	0.100
30	4106	07/31/90	U-CR	.	0.095
31	3393	09/19/90	U-CR	.	0.093
32	1318	12/29/81	D (NPR1)	17.4	0.088
33	1761	11/04/81	U-ELK.	.	0.085
34	4328	08/22/90	D (NPR2)	37.4	0.085
35	1776	12/15/81	U (NPR1)	5.7	0.084
36	3810	08/02/90	U-CR	.	0.081
37	1350	01/08/82	D (NPR1)	26.0	0.077
38	3859	08/03/90	U-CR	.	0.077
39	1731	09/03/81	D (NPR1)	21.5	0.076
40	1725	09/01/81	D (NPR1)	20.5	0.072
41	4313	07/25/90	U (NPR1)	12.3	0.064
42	1326	01/06/82	D (NPR1)	21.9	0.063
43	1345	12/22/81	U (NPR1)	13.8	0.063
44	4073	05/09/90	U (NPR1)	27.3	0.059
45	1348#1	12/22/81	D (NPR1)	17.6	0.058
46	1757	11/04/81	U-ELK.	.	0.056
47	4385#2	12/12/90	D (NPR2)	48.1	0.056
48	1784	12/23/83	U (NPR1)	14.1	0.055
49	4353	07/31/90	U (NPR1)	.	0.054

OBS	FOX_ID	DATE	SITE	AVGDIST	SB
50	1348#2	08/03/82	D (NPR1)	17.6	0.052
51	1756	11/04/81	U-ELK.	.	0.052
52	3612	04/26/90	U (NPR1)	.	0.051
53	4335	12/14/90		.	0.050
54	1324	09/02/81	D (NPR1)	21.9	0.048
55	3713	11/29/90		.	0.047
56	2063	08/03/82	D (NPR1)	17.6	0.046
57	1320	12/23/81	U (NPR1)	17.7	0.045
58	4343	12/15/90	D (NPR2)	27.7	0.045
59	4616	12/05/90		.	0.042
60	4663#2	12/11/90		.	0.042
61	1733	09/02/81	D (NPR1)	21.5	0.040
62	1745	09/01/81	U (NPR1)	13.7	0.039
63	4373#2	08/16/90	D (NPR1)	17.6	0.039
64	1309	11/19/81	D (NPR1)	19.3	0.038
65	1314	12/18/81	U (NPR1)	7.0	0.038
66	1419	11/19/81	D (NPR1)	25.3	0.038
67	1736	09/03/81	D (NPR1)	21.4	0.038
68	1423	12/23/81	D (NPR1)	16.2	0.037
69	4703	12/13/90	D (NPR2)	26.6	0.036
70	1611	12/22/81	D (NPR1)	17.9	0.035
71	1758	11/04/81	U-ELK.	.	0.035
72	1759	11/04/81	U-ELK.	.	0.034
73	3250	07/27/90	U (NPR1)	3.0	0.034
74	4355	08/01/90	U (NPR1)	1.0	0.032
75	1644	08/25/81	U (NPR1)	13.7	0.031
76	1424	12/22/81	D (NPR1)	18.0	0.030
77	1425	12/23/81	D (NPR1)	16.2	0.030
78	1771	11/04/81	U-ELK.	.	0.028
79	4626	07/24/90	U (NPR1)	2.7	0.027
80	3290	07/25/90	U (NPR1)	3.0	0.026
81	3989	12/06/90	D (NPR1)	24.0	0.026
82	4380#1	08/09/90	U (NPR1)	10.3	0.025
83	3784#1	08/03/90	U (NPR1)	3.7	0.023
84	3784#2	11/28/90	U (NPR1)	2.6	0.023
85	4304	07/25/90	U (NPR1)	16.4	0.023
86	125	12/22/81	U (NPR1)	3.0	0.021
87	136	12/15/81	U (NPR1)	3.1	0.018
88	4380#2	12/18/90	U (NPR1)	6.1	0.018
89	3180	12/15/90	D (NPR2)	31.3	0.017
90	4307	08/03/90		.	0.016
91	4306	08/01/90	U (NPR1)	4.5	0.014
92	4025	07/25/90	U (NPR1)	3.3	0.008
93	4326	08/07/90		.	-0.005

OBS	FOX_ID	DATE	SITE	AVGDIST	SC
1	3817	08/28/90	U-CR	.	0.54
2	3589	05/10/90	U-CR	.	0.49
3	1318	12/29/81	D (NPR1)	17.4	0.46
4	3845	04/26/90	U-CR	.	0.46
5	3806	08/31/90	U-CR	.	0.43
6	3727	10/12/90	U-CR	.	0.38
7	3893	06/12/90	U-CR	.	0.38
8	3399	10/05/90	U-CR	.	0.32
9	3819	04/25/90	U-CR	.	0.32
10	1757	11/04/81	U-ELK.	.	0.31
11	3590	05/09/90	U-CR	.	0.31
12	3895	10/19/90	U-CR	.	0.31
13	1350	01/08/82	D (NPR1)	26.0	0.30
14	3212	08/22/90	U-CR	.	0.29
15	3810	08/02/90	U-CR	.	0.27
16	1731	09/03/81	D (NPR1)	21.5	0.26
17	1771	11/04/81	U-ELK.	.	0.26
18	1348#1	12/22/81	D (NPR1)	17.6	0.25
19	4106	07/31/90	U-CR	.	0.25
20	1681	09/01/81	D (NPR1)	18.5	0.24
21	3713	11/29/90		.	0.24
22	1326	01/06/82	D (NPR1)	21.9	0.23
23	1761	11/04/81	U-ELK.	.	0.23
24	3859	08/03/90	U-CR	.	0.23
25	3393	09/19/90	U-CR	.	0.22
26	3884	11/29/90	U-CR	.	0.22
27	1304	12/29/81	U (NPR1)	3.4	0.21
28	1736	09/03/81	D (NPR1)	21.4	0.21
29	1756	11/04/81	U-ELK.	.	0.21
30	3562	06/16/90	D (NPR2)	34.6	0.21
31	3868	10/02/90	U-CR	.	0.21
32	1320	12/23/81	U (NPR1)	17.7	0.20
33	1419	11/19/81	D (NPR1)	25.3	0.20
34	1424	12/22/81	D (NPR1)	18.0	0.20
35	1425	12/23/81	D (NPR1)	16.2	0.20
36	3883	08/01/90	U-CR	.	0.20
37	1759	11/04/81	U-ELK.	.	0.19
38	3684	08/23/90	D (NPR2)	50.7	0.19
39	3808	08/08/90	U-CR	.	0.19
40	1309	11/19/81	D (NPR1)	19.3	0.18
41	1733	09/02/81	D (NPR1)	21.5	0.18
42	1758	11/04/81	U-ELK.	.	0.18
43	3818	04/25/90	U-CR	.	0.18
44	2065	08/03/82	D (NPR1)	17.6	0.17
45	4328	08/22/90	D (NPR2)	37.4	0.17
46	1345	12/22/81	U (NPR1)	13.8	0.16
47	4704	12/15/90	D (NPR2)	25.6	0.16
48	4385#2	12/12/90	D (NPR2)	48.1	0.15
49	4616	12/05/90		.	0.15

OBS	FOX_ID	DATE	SITE	AVGDIST	SC
50	1725	09/01/81	D (NPR1)	20.5	0.14
51	1784	12/23/83	U (NPR1)	14.1	0.14
52	3250	07/27/90	U (NPR1)	3.0	0.14
53	1324	09/02/81	D (NPR1)	21.9	0.13
54	1611	12/22/81	D (NPR1)	17.9	0.130
55	125	12/22/81	U (NPR1)	3.0	0.120
56	1408	12/23/81	D (NPR1)	21.4	0.120
57	1644	08/25/81	U (NPR1)	13.7	0.120
58	2063	08/03/82	D (NPR1)	17.6	0.120
59	1348#2	08/03/82	D (NPR1)	17.6	0.110
60	4343	12/15/90	D (NPR2)	27.7	0.110
61	4654	12/07/90	D (NPR1)	17.9	0.110
62	1423	12/23/81	D (NPR1)	16.2	0.100
63	1745	09/01/81	U (NPR1)	13.7	0.100
64	3700	12/12/90	D (NPR2)	41.8	0.100
65	3784#2	11/28/90	U (NPR1)	2.6	0.100
66	4355	08/01/90	U (NPR1)	1.0	0.100
67	4703	12/13/90	D (NPR2)	26.6	0.090
68	1314	12/18/81	U (NPR1)	7.0	0.084
69	136	12/15/81	U (NPR1)	3.1	0.081
70	3290	07/25/90	U (NPR1)	3.0	0.080
71	3612	04/26/90	U (NPR1)	.	0.080
72	3784#1	08/03/90	U (NPR1)	3.7	0.080
73	3792	08/24/90	D (NPR2)	28.9	0.080
74	4073	05/09/90	U (NPR1)	27.3	0.080
75	4326	08/07/90		.	0.080
76	4335	12/14/90		.	0.080
77	4373#1	05/09/90	D (NPR1)	17.6	0.080
78	4380#1	08/09/90	U (NPR1)	10.3	0.080
79	4640	08/22/90	D (NPR2)	50.7	0.080
80	4682	08/16/90	D (NPR2)	26.0	0.080
81	3989	12/06/90	D (NPR1)	24.0	0.070
82	4380#2	12/18/90	U (NPR1)	6.1	0.070
83	4626	07/24/90	U (NPR1)	2.7	0.070
84	4663#2	12/11/90		.	0.070
85	1776	12/15/81	U (NPR1)	5.7	0.069
86	3180	12/15/90	D (NPR2)	31.3	0.060
87	4353	07/31/90	U (NPR1)	.	0.060
88	4373#2	08/16/90	D (NPR1)	17.6	0.060
89	4304	07/25/90	U (NPR1)	16.4	0.050
90	4307	08/03/90		.	0.050
91	4313	07/25/90	U (NPR1)	12.3	0.050
92	4025	07/25/90	U (NPR1)	3.3	0.040
93	4306	08/01/90	U (NPR1)	4.5	0.040

OBS	FOX_ID	DATE	SITE	AVGDIST	SE
1	1759	11/04/81	U-ELK.	.	4.2
2	1756	11/04/81	U-ELK.	.	3.6
3	1758	11/04/81	U-ELK.	.	3.0
4	4703	12/13/90	D (NPR2)	26.6	3.0
5	1736	09/03/81	D (NPR1)	21.4	1.8
6	1757	11/04/81	U-ELK.	.	1.7
7	3393	09/19/90	U-CR	.	1.7
8	3818	04/25/90	U-CR	.	1.7
9	1314	12/18/81	U (NPR1)	7.0	1.6
10	3589	05/10/90	U-CR	.	1.6
11	3727	10/12/90	U-CR	.	1.6
12	3700	12/12/90	D (NPR2)	41.8	1.5
13	1761	11/04/81	U-ELK.	.	1.4
14	4663#2	12/11/90		.	1.4
15	3810	08/02/90	U-CR	.	1.3
16	4335	12/14/90		.	1.3
17	4355	08/01/90	U (NPR1)	1.0	1.3
18	4704	12/15/90	D (NPR2)	25.6	1.3
19	1304	12/29/81	U (NPR1)	3.4	1.2
20	1309	11/19/81	D (NPR1)	19.3	1.2
21	1345	12/22/81	U (NPR1)	13.8	1.2
22	1681	09/01/81	D (NPR1)	18.5	1.2
23	3792	08/24/90	D (NPR2)	28.9	1.2
24	3808	08/08/90	U-CR	.	1.2
25	3817	08/28/90	U-CR	.	1.2
26	3819	04/25/90	U-CR	.	1.2
27	1350	01/08/82	D (NPR1)	26.0	1.1
28	136	12/15/81	U (NPR1)	3.1	1.1
29	3212	08/22/90	U-CR	.	1.1
30	3399	10/05/90	U-CR	.	1.1
31	3590	05/09/90	U-CR	.	1.1
32	3806	08/31/90	U-CR	.	1.1
33	4373#1	05/09/90	D (NPR1)	17.6	1.1
34	4373#2	08/16/90	D (NPR1)	17.6	1.1
35	4626	07/24/90	U (NPR1)	2.7	1.1
36	4640	08/22/90	D (NPR2)	50.7	1.1
37	4654	12/07/90	D (NPR1)	17.9	1.1
38	4682	08/16/90	D (NPR2)	26.0	1.1
39	125	12/22/81	U (NPR1)	3.0	1.0
40	1348#2	08/03/82	D (NPR1)	17.6	1.0
41	1419	11/19/81	D (NPR1)	25.3	1.0
42	1425	12/23/81	D (NPR1)	16.2	1.0
43	1771	11/04/81	U-ELK.	.	1.0
44	2063	08/03/82	D (NPR1)	17.6	1.0
45	3180	12/15/90	D (NPR2)	31.3	1.0
46	3250	07/27/90	U (NPR1)	3.0	1.0
47	3562	06/16/90	D (NPR2)	34.6	1.0
48	3612	04/26/90	U (NPR1)	.	1.0
49	3859	08/03/90	U-CR	.	1.0

OBS	FOX_ID	DATE	SITE	AVGDIST	SE
50	4073	05/09/90	U (NPR1)	27.3	1.0
51	4306	08/01/90	U (NPR1)	4.5	1.0
52	4328	08/22/90	D (NPR2)	37.4	1.0
53	4343	12/15/90	D (NPR2)	27.7	1.0
54	4380#1	08/09/90	U (NPR1)	10.3	1.00
55	4380#2	12/18/90	U (NPR1)	6.1	1.00
56	1320	12/23/81	U (NPR1)	17.7	0.98
57	1408	12/23/81	D (NPR1)	21.4	0.98
58	1784	12/23/83	U (NPR1)	14.1	0.94
59	1348#1	12/22/81	D (NPR1)	17.6	0.90
60	1423	12/23/81	D (NPR1)	16.2	0.90
61	1424	12/22/81	D (NPR1)	18.0	0.90
62	1644	08/25/81	U (NPR1)	13.7	0.90
63	3684	08/23/90	D (NPR2)	50.7	0.90
64	3713	11/29/90		.	0.90
65	3784#1	08/03/90	U (NPR1)	3.7	0.90
66	3883	08/01/90	U-CR	.	0.90
67	3884	11/29/90	U-CR	.	0.90
68	3895	10/19/90	U-CR	.	0.90
69	4326	08/07/90		.	0.90
70	4353	07/31/90	U (NPR1)	.	0.90
71	4385#2	12/12/90	D (NPR2)	48.1	0.90
72	1776	12/15/81	U (NPR1)	5.7	0.89
73	1324	09/02/81	D (NPR1)	21.9	0.81
74	1611	12/22/81	D (NPR1)	17.9	0.80
75	1731	09/03/81	D (NPR1)	21.5	0.80
76	1733	09/02/81	D (NPR1)	21.5	0.80
77	1745	09/01/81	U (NPR1)	13.7	0.80
78	2065	08/03/82	D (NPR1)	17.6	0.80
79	3290	07/25/90	U (NPR1)	3.0	0.80
80	3845	04/26/90	U-CR	.	0.80
81	3868	10/02/90	U-CR	.	0.80
82	4307	08/03/90		.	0.80
83	1326	01/06/82	D (NPR1)	21.9	0.74
84	1725	09/01/81	D (NPR1)	20.5	0.70
85	3989	12/06/90	D (NPR1)	24.0	0.70
86	4025	07/25/90	U (NPR1)	3.3	0.70
87	4313	07/25/90	U (NPR1)	12.3	0.70
88	4616	12/05/90		.	0.70
89	1318	12/29/81	D (NPR1)	17.4	0.60
90	3784#2	11/28/90	U (NPR1)	2.6	0.60
91	4304	07/25/90	U (NPR1)	16.4	0.60
92	3893	06/12/90	U-CR	.	0.50
93	4106	07/31/90	U-CR	.	0.50

OBS	FOX_ID	DATE	SITE	AVGDIST	SM
1	3589	05/10/90	U-CR	.	0.200
2	3895	10/19/90	U-CR	.	0.180
3	1318	12/29/81	D (NPR1)	17.4	0.170
4	3845	04/26/90	U-CR	.	0.170
5	1326	01/06/82	D (NPR1)	21.9	0.160
6	3819	04/25/90	U-CR	.	0.160
7	3893	06/12/90	U-CR	.	0.160
8	3727	10/12/90	U-CR	.	0.150
9	3810	08/02/90	U-CR	.	0.150
10	3806	08/31/90	U-CR	.	0.140
11	1350	01/08/82	D (NPR1)	26.0	0.120
12	3399	10/05/90	U-CR	.	0.120
13	1757	11/04/81	U-ELK.	.	0.110
14	3212	08/22/90	U-CR	.	0.110
15	3590	05/09/90	U-CR	.	0.110
16	1681	09/01/81	D (NPR1)	18.5	0.100
17	1771	11/04/81	U-ELK.	.	0.100
18	3884	11/29/90	U-CR	.	0.100
19	3859	08/03/90	U-CR	.	0.093
20	1348#1	12/22/81	D (NPR1)	17.6	0.092
21	1731	09/03/81	D (NPR1)	21.5	0.092
22	3818	04/25/90	U-CR	.	0.091
23	3868	10/02/90	U-CR	.	0.089
24	1320	12/23/81	U (NPR1)	17.7	0.088
25	3393	09/19/90	U-CR	.	0.087
26	3713	11/29/90		.	0.085
27	1419	11/19/81	D (NPR1)	25.3	0.084
28	1425	12/23/81	D (NPR1)	16.2	0.083
29	1304	12/29/81	U (NPR1)	3.4	0.082
30	3684	08/23/90	D (NPR2)	50.7	0.080
31	4616	12/05/90		.	0.080
32	1761	11/04/81	U-ELK.	.	0.079
33	1424	12/22/81	D (NPR1)	18.0	0.078
34	3562	06/16/90	D (NPR2)	34.6	0.078
35	1345	12/22/81	U (NPR1)	13.8	0.075
36	3808	08/08/90	U-CR	.	0.075
37	1324	09/02/81	D (NPR1)	21.9	0.072
38	1309	11/19/81	D (NPR1)	19.3	0.071
39	1733	09/02/81	D (NPR1)	21.5	0.071
40	1756	11/04/81	U-ELK.	.	0.070
41	3250	07/27/90	U (NPR1)	3.0	0.069
42	4328	08/22/90	D (NPR2)	37.4	0.067
43	1758	11/04/81	U-ELK.	.	0.066
44	1759	11/04/81	U-ELK.	.	0.066
45	1644	08/25/81	U (NPR1)	13.7	0.063
46	1784	12/23/83	U (NPR1)	14.1	0.063
47	2065	08/03/82	D (NPR1)	17.6	0.061
48	125	12/22/81	U (NPR1)	3.0	0.060
49	4704	12/15/90	D (NPR2)	25.6	0.058

OBS	FOX_ID	DATE	SITE	AVGDIST	SM
50	1725	09/01/81	D (NPR1)	20.5	0.057
51	1408	12/23/81	D (NPR1)	21.4	0.056
52	4654	12/07/90	D (NPR1)	17.9	0.056
53	3290	07/25/90	U (NPR1)	3.0	0.054
54	1314	12/18/81	U (NPR1)	7.0	0.052
55	1611	12/22/81	D (NPR1)	17.9	0.051
56	3784#1	08/03/90	U (NPR1)	3.7	0.050
57	4640	08/22/90	D (NPR2)	50.7	0.050
58	3784#2	11/28/90	U (NPR1)	2.6	0.048
59	3883	08/01/90	U-CR	.	0.047
60	136	12/15/81	U (NPR1)	3.1	0.046
61	3817	08/28/90	U-CR	.	0.046
62	4343	12/15/90	D (NPR2)	27.7	0.046
63	1423	12/23/81	D (NPR1)	16.2	0.045
64	1776	12/15/81	U (NPR1)	5.7	0.045
65	3612	04/26/90	U (NPR1)	.	0.044
66	4106	07/31/90	U-CR	.	0.044
67	1745	09/01/81	U (NPR1)	13.7	0.043
68	4073	05/09/90	U (NPR1)	27.3	0.041
69	4703	12/13/90	D (NPR2)	26.6	0.040
70	3792	08/24/90	D (NPR2)	28.9	0.039
71	4373#2	08/16/90	D (NPR1)	17.6	0.039
72	4380#2	12/18/90	U (NPR1)	6.1	0.039
73	2063	08/03/82	D (NPR1)	17.6	0.038
74	4373#1	05/09/90	D (NPR1)	17.6	0.038
75	1348#2	08/03/82	D (NPR1)	17.6	0.036
76	3700	12/12/90	D (NPR2)	41.8	0.036
77	4385#2	12/12/90	D (NPR2)	48.1	0.034
78	4307	08/03/90		.	0.033
79	4682	08/16/90	D (NPR2)	26.0	0.033
80	3989	12/06/90	D (NPR1)	24.0	0.031
81	4313	07/25/90	U (NPR1)	12.3	0.027
82	4353	07/31/90	U (NPR1)	.	0.027
83	1736	09/03/81	D (NPR1)	21.4	0.026
84	3180	12/15/90	D (NPR2)	31.3	0.026
85	4335	12/14/90		.	0.025
86	4663#2	12/11/90		.	0.025
87	4626	07/24/90	U (NPR1)	2.7	0.024
88	4355	08/01/90	U (NPR1)	1.0	0.020
89	4304	07/25/90	U (NPR1)	16.4	0.018
90	4306	08/01/90	U (NPR1)	4.5	0.017
91	4025	07/25/90	U (NPR1)	3.3	0.016
92	4326	08/07/90		.	0.015
93	4380#1	08/09/90	U (NPR1)	10.3	0.014

OBS	FOX_ID	DATE	SITE	AVGDIST	SN
1	1304	12/29/81	U (NPR1)	3.4	-0.01
2	1309	11/19/81	D (NPR1)	19.3	-0.01
3	1318	12/29/81	D (NPR1)	17.4	-0.01
4	1348#1	12/22/81	D (NPR1)	17.6	-0.01
5	1348#2	08/03/82	D (NPR1)	17.6	-0.01
6	1350	01/08/82	D (NPR1)	26.0	-0.01
7	1419	11/19/81	D (NPR1)	25.3	-0.01
8	1423	12/23/81	D (NPR1)	16.2	-0.01
9	1424	12/22/81	D (NPR1)	18.0	-0.01
10	1425	12/23/81	D (NPR1)	16.2	-0.01
11	1611	12/22/81	D (NPR1)	17.9	-0.01
12	1644	08/25/81	U (NPR1)	13.7	-0.01
13	1681	09/01/81	D (NPR1)	18.5	-0.01
14	1725	09/01/81	D (NPR1)	20.5	-0.01
15	1731	09/03/81	D (NPR1)	21.5	-0.01
16	1733	09/02/81	D (NPR1)	21.5	-0.01
17	1736	09/03/81	D (NPR1)	21.4	-0.01
18	1745	09/01/81	U (NPR1)	13.7	-0.01
19	1756	11/04/81	U-ELK.	.	-0.01
20	1757	11/04/81	U-ELK.	.	-0.01
21	1758	11/04/81	U-ELK.	.	-0.01
22	1759	11/04/81	U-ELK.	.	-0.01
23	1761	11/04/81	U-ELK.	.	-0.01
24	1771	11/04/81	U-ELK.	.	-0.01
25	2063	08/03/82	D (NPR1)	17.6	-0.01
26	2065	08/03/82	D (NPR1)	17.6	-0.01
27	3180	12/15/90	D (NPR2)	31.3	-0.01
28	3212	08/22/90	U-CR	.	-0.01
29	3250	07/27/90	U (NPR1)	3.0	-0.01
30	3290	07/25/90	U (NPR1)	3.0	-0.01
31	3393	09/19/90	U-CR	.	-0.01
32	3399	10/05/90	U-CR	.	-0.01
33	3562	06/16/90	D (NPR2)	34.6	-0.01
34	3589	05/10/90	U-CR	.	-0.01
35	3590	05/09/90	U-CR	.	-0.01
36	3612	04/26/90	U (NPR1)	.	-0.01
37	3684	08/23/90	D (NPR2)	50.7	-0.01
38	3700	12/12/90	D (NPR2)	41.8	-0.01
39	3713	11/29/90		.	-0.01
40	3727	10/12/90	U-CR	.	-0.01
41	3784#1	08/03/90	U (NPR1)	3.7	-0.01
42	3784#2	11/28/90	U (NPR1)	2.6	-0.01
43	3792	08/24/90	D (NPR2)	28.9	-0.01
44	3806	08/31/90	U-CR	.	-0.01
45	3808	08/08/90	U-CR	.	-0.01
46	3810	08/02/90	U-CR	.	-0.01
47	3817	08/28/90	U-CR	.	-0.01
48	3818	04/25/90	U-CR	.	-0.01
49	3819	04/25/90	U-CR	.	-0.01

OBS	FOX_ID	DATE	SITE	AVGDIST	SN
50	3845	04/26/90	U-CR	.	-0.01
51	3859	08/03/90	U-CR	.	-0.01
52	3868	10/02/90	U-CR	.	-0.01
53	3883	08/01/90	U-CR	.	-0.01
54	3884	11/29/90	U-CR	.	-0.01
55	3893	06/12/90	U-CR	.	-0.01
56	3895	10/19/90	U-CR	.	-0.01
57	3989	12/06/90	D (NPR1)	24.0	-0.01
58	4025	07/25/90	U (NPR1)	3.3	-0.01
59	4073	05/09/90	U (NPR1)	27.3	-0.01
60	4106	07/31/90	U-CR	.	-0.01
61	4304	07/25/90	U (NPR1)	16.4	-0.01
62	4306	08/01/90	U (NPR1)	4.5	-0.01
63	4307	08/03/90		.	-0.01
64	4313	07/25/90	U (NPR1)	12.3	-0.01
65	4326	08/07/90		.	-0.01
66	4328	08/22/90	D (NPR2)	37.4	-0.01
67	4335	12/14/90		.	-0.01
68	4343	12/15/90	D (NPR2)	27.7	-0.01
69	4353	07/31/90	U (NPR1)	.	-0.01
70	4355	08/01/90	U (NPR1)	1.0	-0.01
71	4373#1	05/09/90	D (NPR1)	17.6	-0.01
72	4373#2	08/16/90	D (NPR1)	17.6	-0.01
73	4380#1	08/09/90	U (NPR1)	10.3	-0.01
74	4380#2	12/18/90	U (NPR1)	6.1	-0.01
75	4385#2	12/12/90	D (NPR2)	48.1	-0.01
76	4616	12/05/90		.	-0.01
77	4626	07/24/90	U (NPR1)	2.7	-0.01
78	4640	08/22/90	D (NPR2)	50.7	-0.01
79	4654	12/07/90	D (NPR1)	17.9	-0.01
80	4663#2	12/11/90		.	-0.01
81	4682	08/16/90	D (NPR2)	26.0	-0.01
82	4703	12/13/90	D (NPR2)	26.6	-0.01
83	4704	12/15/90	D (NPR2)	25.6	-0.01
84	125	12/22/81	U (NPR1)	3.0	.
85	1314	12/18/81	U (NPR1)	7.0	.
86	1320	12/23/81	U (NPR1)	17.7	.
87	1324	09/02/81	D (NPR1)	21.9	.
88	1326	01/06/82	D (NPR1)	21.9	.
89	1345	12/22/81	U (NPR1)	13.8	.
90	136	12/15/81	U (NPR1)	3.1	.
91	1408	12/23/81	D (NPR1)	21.4	.
92	1776	12/15/81	U (NPR1)	5.7	.
93	1784	12/23/83	U (NPR1)	14.1	.

OBS	FOX_ID	DATE	SITE	AVGDIST	SR
1	125	12/22/81	U (NPR1)	3.0	-2
2	1314	12/18/81	U (NPR1)	7.0	-2
3	1320	12/23/81	U (NPR1)	17.7	-2
4	1324	09/02/81	D (NPR1)	21.9	-2
5	1326	01/06/82	D (NPR1)	21.9	-2
6	1345	12/22/81	U (NPR1)	13.8	-2
7	136	12/15/81	U (NPR1)	3.1	-2
8	1408	12/23/81	D (NPR1)	21.4	-2
9	1776	12/15/81	U (NPR1)	5.7	-2
10	1784	12/23/83	U (NPR1)	14.1	-2
11	1304	12/29/81	U (NPR1)	3.4	-10
12	1309	11/19/81	D (NPR1)	19.3	-10
13	1318	12/29/81	D (NPR1)	17.4	-10
14	1348#1	12/22/81	D (NPR1)	17.6	-10
15	1348#2	08/03/82	D (NPR1)	17.6	-10
16	1350	01/08/82	D (NPR1)	26.0	-10
17	1419	11/19/81	D (NPR1)	25.3	-10
18	1423	12/23/81	D (NPR1)	16.2	-10
19	1424	12/22/81	D (NPR1)	18.0	-10
20	1425	12/23/81	D (NPR1)	16.2	-10
21	1611	12/22/81	D (NPR1)	17.9	-10
22	1644	08/25/81	U (NPR1)	13.7	-10
23	1681	09/01/81	D (NPR1)	18.5	-10
24	1725	09/01/81	D (NPR1)	20.5	-10
25	1731	09/03/81	D (NPR1)	21.5	-10
26	1733	09/02/81	D (NPR1)	21.5	-10
27	1736	09/03/81	D (NPR1)	21.4	-10
28	1745	09/01/81	U (NPR1)	13.7	-10
29	1756	11/04/81	U-ELK.	.	-10
30	1757	11/04/81	U-ELK.	.	-10
31	1758	11/04/81	U-ELK.	.	-10
32	1759	11/04/81	U-ELK.	.	-10
33	1761	11/04/81	U-ELK.	.	-10
34	1771	11/04/81	U-ELK.	.	-10
35	2065	08/03/82	D (NPR1)	17.6	-10
36	3180	12/15/90	D (NPR2)	31.3	-10
37	3212	08/22/90	U-CR	.	-10
38	3250	07/27/90	U (NPR1)	3.0	-10
39	3290	07/25/90	U (NPR1)	3.0	-10
40	3393	09/19/90	U-CR	.	-10
41	3399	10/05/90	U-CR	.	-10
42	3562	06/16/90	D (NPR2)	34.6	-10
43	3589	05/10/90	U-CR	.	-10
44	3590	05/09/90	U-CR	.	-10
45	3612	04/26/90	U (NPR1)	.	-10
46	3684	08/23/90	D (NPR2)	50.7	-10
47	3700	12/12/90	D (NPR2)	41.8	-10
48	3713	11/29/90		.	-10
49	3727	10/12/90	U-CR	.	-10

OBS	FOX_ID	DATE	SITE	AVGDIST	SR
50	3784#1	08/03/90	U (NPR1)	3.7	-10
51	3784#2	11/28/90	U (NPR1)	2.6	-10
52	3792	08/24/90	D (NPR2)	28.9	-10
53	3806	08/31/90	U-CR	.	-10
54	3808	08/08/90	U-CR	.	-10
55	3810	08/02/90	U-CR	.	-10
56	3818	04/25/90	U-CR	.	-10
57	3819	04/25/90	U-CR	.	-10
58	3845	04/26/90	U-CR	.	-10
59	3859	08/03/90	U-CR	.	-10
60	3868	10/02/90	U-CR	.	-10
61	3883	08/01/90	U-CR	.	-10
62	3884	11/29/90	U-CR	.	-10
63	3893	06/12/90	U-CR	.	-10
64	3895	10/19/90	U-CR	.	-10
65	3989	12/06/90	D (NPR1)	24.0	-10
66	4025	07/25/90	U (NPR1)	3.3	-10
67	4073	05/09/90	U (NPR1)	27.3	-10
68	4106	07/31/90	U-CR	.	-10
69	4304	07/25/90	U (NPR1)	16.4	-10
70	4306	08/01/90	U (NPR1)	4.5	-10
71	4307	08/03/90		.	-10
72	4313	07/25/90	U (NPR1)	12.3	-10
73	4328	08/22/90	D (NPR2)	37.4	-10
74	4335	12/14/90		.	-10
75	4343	12/15/90	D (NPR2)	27.7	-10
76	4353	07/31/90	U (NPR1)	.	-10
77	4373#1	05/09/90	D (NPR1)	17.6	-10
78	4373#2	08/16/90	D (NPR1)	17.6	-10
79	4380#1	08/09/90	U (NPR1)	10.3	-10
80	4380#2	12/18/90	U (NPR1)	6.1	-10
81	4385#2	12/12/90	D (NPR2)	48.1	-10
82	4616	12/05/90		.	-10
83	4626	07/24/90	U (NPR1)	2.7	-10
84	4654	12/07/90	D (NPR1)	17.9	-10
85	4663#2	12/11/90		.	-10
86	4682	08/16/90	D (NPR2)	26.0	-10
87	4703	12/13/90	D (NPR2)	26.6	-10
88	4704	12/15/90	D (NPR2)	25.6	-10
89	4326	08/07/90		.	-11
90	4640	08/22/90	D (NPR2)	50.7	-11
91	4355	08/01/90	U (NPR1)	1.0	-13
92	2063	08/03/82	D (NPR1)	17.6	-14
93	3817	08/28/90	U-CR	.	-29

OBS	FOX_ID	DATE	SITE	AVGDIST	TA
1	4106	07/31/90	U-CR	.	0.54
2	3893	06/12/90	U-CR	.	0.35
3	3883	08/01/90	U-CR	.	0.31
4	4626	07/24/90	U (NPR1)	2.7	0.28
5	4663#2	12/11/90		.	0.21
6	2065	08/03/82	D (NPR1)	17.6	0.19
7	1736	09/03/81	D (NPR1)	21.4	0.17
8	3819	04/25/90	U-CR	.	0.17
9	4380#1	08/09/90	U (NPR1)	10.3	0.14
10	3250	07/27/90	U (NPR1)	3.0	0.12
11	3700	12/12/90	D (NPR2)	41.8	0.12
12	4304	07/25/90	U (NPR1)	16.4	0.11
13	4682	08/16/90	D (NPR2)	26.0	0.11
14	1771	11/04/81	U-ELK.	.	0.09
15	3859	08/03/90	U-CR	.	0.09
16	4640	08/22/90	D (NPR2)	50.7	0.09
17	4654	12/07/90	D (NPR1)	17.9	0.09
18	1759	11/04/81	U-ELK.	.	0.08
19	3806	08/31/90	U-CR	.	0.08
20	4355	08/01/90	U (NPR1)	1.0	0.08
21	3562	06/16/90	D (NPR2)	34.6	0.07
22	3589	05/10/90	U-CR	.	0.07
23	3590	05/09/90	U-CR	.	0.07
24	3810	08/02/90	U-CR	.	0.07
25	3684	08/23/90	D (NPR2)	50.7	0.06
26	3612	04/26/90	U (NPR1)	.	0.05
27	4703	12/13/90	D (NPR2)	26.6	0.05
28	4704	12/15/90	D (NPR2)	25.6	0.05
29	125	12/22/81	U (NPR1)	3.0	-0.03
30	1314	12/18/81	U (NPR1)	7.0	-0.03
31	1320	12/23/81	U (NPR1)	17.7	-0.03
32	1324	09/02/81	D (NPR1)	21.9	-0.03
33	1326	01/06/82	D (NPR1)	21.9	-0.03
34	1345	12/22/81	U (NPR1)	13.8	-0.03
35	136	12/15/81	U (NPR1)	3.1	-0.03
36	1408	12/23/81	D (NPR1)	21.4	-0.03
37	1776	12/15/81	U (NPR1)	5.7	-0.03
38	1784	12/23/83	U (NPR1)	14.1	-0.03
39	1304	12/29/81	U (NPR1)	3.4	-0.05
40	1309	11/19/81	D (NPR1)	19.3	-0.05
41	1318	12/29/81	D (NPR1)	17.4	-0.05
42	1348#1	12/22/81	D (NPR1)	17.6	-0.05
43	1348#2	08/03/82	D (NPR1)	17.6	-0.05
44	1350	01/08/82	D (NPR1)	26.0	-0.05
45	1419	11/19/81	D (NPR1)	25.3	-0.05
46	1423	12/23/81	D (NPR1)	16.2	-0.05
47	1424	12/22/81	D (NPR1)	18.0	-0.05
48	1425	12/23/81	D (NPR1)	16.2	-0.05
49	1611	12/22/81	D (NPR1)	17.9	-0.05

OBS	FOX_ID	DATE	SITE	AVGDIST	TA
50	1644	08/25/81	U (NPR1)	13.7	-0.05
51	1681	09/01/81	D (NPR1)	18.5	-0.05
52	1725	09/01/81	D (NPR1)	20.5	-0.05
53	1731	09/03/81	D (NPR1)	21.5	-0.05
54	1733	09/02/81	D (NPR1)	21.5	-0.05
55	1745	09/01/81	U (NPR1)	13.7	-0.05
56	1756	11/04/81	U-ELK.	.	-0.05
57	1757	11/04/81	U-ELK.	.	-0.05
58	1758	11/04/81	U-ELK.	.	-0.05
59	1761	11/04/81	U-ELK.	.	-0.05
60	2063	08/03/82	D (NPR1)	17.6	-0.05
61	3180	12/15/90	D (NPR2)	31.3	-0.05
62	3212	08/22/90	U-CR	.	-0.05
63	3290	07/25/90	U (NPR1)	3.0	-0.05
64	3393	09/19/90	U-CR	.	-0.05
65	3399	10/05/90	U-CR	.	-0.05
66	3713	11/29/90		.	-0.05
67	3727	10/12/90	U-CR	.	-0.05
68	3784#1	08/03/90	U (NPR1)	3.7	-0.05
69	3784#2	11/28/90	U (NPR1)	2.6	-0.05
70	3792	08/24/90	D (NPR2)	28.9	-0.05
71	3808	08/08/90	U-CR	.	-0.05
72	3817	08/28/90	U-CR	.	-0.05
73	3818	04/25/90	U-CR	.	-0.05
74	3845	04/26/90	U-CR	.	-0.05
75	3868	10/02/90	U-CR	.	-0.05
76	3884	11/29/90	U-CR	.	-0.05
77	3895	10/19/90	U-CR	.	-0.05
78	3989	12/06/90	D (NPR1)	24.0	-0.05
79	4025	07/25/90	U (NPR1)	3.3	-0.05
80	4073	05/09/90	U (NPR1)	27.3	-0.05
81	4306	08/01/90	U (NPR1)	4.5	-0.05
82	4307	08/03/90		.	-0.05
83	4313	07/25/90	U (NPR1)	12.3	-0.05
84	4326	08/07/90		.	-0.05
85	4328	08/22/90	D (NPR2)	37.4	-0.05
86	4335	12/14/90		.	-0.05
87	4343	12/15/90	D (NPR2)	27.7	-0.05
88	4353	07/31/90	U (NPR1)	.	-0.05
89	4373#1	05/09/90	D (NPR1)	17.6	-0.05
90	4373#2	08/16/90	D (NPR1)	17.6	-0.05
91	4380#2	12/18/90	U (NPR1)	6.1	-0.05
92	4385#2	12/12/90	D (NPR2)	48.1	-0.05
93	4616	12/05/90		.	-0.05

OBS	FOX_ID	DATE	SITE	AVGDIST	TB
1	125	12/22/81	U (NPR1)	3.0	0.01
2	1314	12/18/81	U (NPR1)	7.0	-0.01
3	1320	12/23/81	U (NPR1)	17.7	-0.01
4	1324	09/02/81	D (NPR1)	21.9	-0.01
5	1326	01/06/82	D (NPR1)	21.9	-0.01
6	1345	12/22/81	U (NPR1)	13.8	-0.01
7	136	12/15/81	U (NPR1)	3.1	-0.01
8	1408	12/23/81	D (NPR1)	21.4	-0.01
9	1776	12/15/81	U (NPR1)	5.7	-0.01
10	1784	12/23/83	U (NPR1)	14.1	-0.01
11	1304	12/29/81	U (NPR1)	3.4	-0.05
12	1309	11/19/81	D (NPR1)	19.3	-0.05
13	1318	12/29/81	D (NPR1)	17.4	-0.05
14	1348#1	12/22/81	D (NPR1)	17.6	-0.05
15	1348#2	08/03/82	D (NPR1)	17.6	-0.05
16	1350	01/08/82	D (NPR1)	26.0	-0.05
17	1419	11/19/81	D (NPR1)	25.3	-0.05
18	1423	12/23/81	D (NPR1)	16.2	-0.05
19	1424	12/22/81	D (NPR1)	18.0	-0.05
20	1425	12/23/81	D (NPR1)	16.2	-0.05
21	1611	12/22/81	D (NPR1)	17.9	-0.05
22	1644	08/25/81	U (NPR1)	13.7	-0.05
23	1681	09/01/81	D (NPR1)	18.5	-0.05
24	1725	09/01/81	D (NPR1)	20.5	-0.05
25	1731	09/03/81	D (NPR1)	21.5	-0.05
26	1733	09/02/81	D (NPR1)	21.5	-0.05
27	1736	09/03/81	D (NPR1)	21.4	-0.05
28	1745	09/01/81	U (NPR1)	13.7	-0.05
29	1756	11/04/81	U-ELK.	.	-0.05
30	1757	11/04/81	U-ELK.	.	-0.05
31	1758	11/04/81	U-ELK.	.	-0.05
32	1759	11/04/81	U-ELK.	.	-0.05
33	1761	11/04/81	U-ELK.	.	-0.05
34	1771	11/04/81	U-ELK.	.	-0.05
35	2063	08/03/82	D (NPR1)	17.6	-0.05
36	2065	08/03/82	D (NPR1)	17.6	-0.05
37	3180	12/15/90	D (NPR2)	31.3	-0.05
38	3212	08/22/90	U-CR	.	-0.05
39	3250	07/27/90	U (NPR1)	3.0	-0.05
40	3290	07/25/90	U (NPR1)	3.0	-0.05
41	3393	09/19/90	U-CR	.	-0.05
42	3399	10/05/90	U-CR	.	-0.05
43	3562	06/16/90	D (NPR2)	34.6	-0.05
44	3589	05/10/90	U-CR	.	-0.05
45	3590	05/09/90	U-CR	.	-0.05
46	3612	04/26/90	U (NPR1)	.	-0.05
47	3684	08/23/90	D (NPR2)	50.7	-0.05
48	3700	12/12/90	D (NPR2)	41.8	-0.05
49	3713	11/29/90		.	-0.05

OBS	FOX_ID	DATE	SITE	AVGDIST	TB
50	3727	10/12/90	U-CR	.	-0.05
51	3784#1	08/03/90	U (NPR1)	3.7	-0.05
52	3784#2	11/28/90	U (NPR1)	2.6	-0.05
53	3792	08/24/90	D (NPR2)	28.9	-0.05
54	3806	08/31/90	U-CR	.	-0.05
55	3808	08/08/90	U-CR	.	-0.05
56	3810	08/02/90	U-CR	.	-0.05
57	3817	08/28/90	U-CR	.	-0.05
58	3818	04/25/90	U-CR	.	-0.05
59	3819	04/25/90	U-CR	.	-0.05
60	3845	04/26/90	U-CR	.	-0.05
61	3859	08/03/90	U-CR	.	-0.05
62	3868	10/02/90	U-CR	.	-0.05
63	3883	08/01/90	U-CR	.	-0.05
64	3884	11/29/90	U-CR	.	-0.05
65	3893	06/12/90	U-CR	.	-0.05
66	3895	10/19/90	U-CR	.	-0.05
67	3989	12/06/90	D (NPR1)	24.0	-0.05
68	4025	07/25/90	U (NPR1)	3.3	-0.05
69	4073	05/09/90	U (NPR1)	27.3	-0.05
70	4106	07/31/90	U-CR	.	-0.05
71	4304	07/25/90	U (NPR1)	16.4	-0.05
72	4306	08/01/90	U (NPR1)	4.5	-0.05
73	4307	08/03/90		.	-0.05
74	4313	07/25/90	U (NPR1)	12.3	-0.05
75	4326	08/07/90		.	-0.05
76	4328	08/22/90	D (NPR2)	37.4	-0.05
77	4335	12/14/90		.	-0.05
78	4343	12/15/90	D (NPR2)	27.7	-0.05
79	4353	07/31/90	U (NPR1)	.	-0.05
80	4355	08/01/90	U (NPR1)	1.0	-0.05
81	4373#1	05/09/90	D (NPR1)	17.6	-0.05
82	4373#2	08/16/90	D (NPR1)	17.6	-0.05
83	4380#1	08/09/90	U (NPR1)	10.3	-0.05
84	4380#2	12/18/90	U (NPR1)	6.1	-0.05
85	4385#2	12/12/90	D (NPR2)	48.1	-0.05
86	4616	12/05/90		.	-0.05
87	4626	07/24/90	U (NPR1)	2.7	-0.05
88	4640	08/22/90	D (NPR2)	50.7	-0.05
89	4654	12/07/90	D (NPR1)	17.9	-0.05
90	4663#2	12/11/90		.	-0.05
91	4682	08/16/90	D (NPR2)	26.0	-0.05
92	4703	12/13/90	D (NPR2)	26.6	-0.05
93	4704	12/15/90	D (NPR2)	25.6	-0.05

OBS	FOX_ID	DATE	SITE	AVGDIST	TH
1	3589	05/10/90	U-CR	.	0.52
2	3895	10/19/90	U-CR	.	0.48
3	1318	12/29/81	D (NPR1)	17.4	0.46
4	3845	04/26/90	U-CR	.	0.46
5	3727	10/12/90	U-CR	.	0.41
6	3810	08/02/90	U-CR	.	0.41
7	3893	06/12/90	U-CR	.	0.41
8	3819	04/25/90	U-CR	.	0.40
9	3806	08/31/90	U-CR	.	0.37
10	1350	01/08/82	D (NPR1)	26.0	0.34
11	1757	11/04/81	U-ELK.	.	0.34
12	3817	08/28/90	U-CR	.	0.33
13	1681	09/01/81	D (NPR1)	18.5	0.31
14	1771	11/04/81	U-ELK.	.	0.30
15	3399	10/05/90	U-CR	.	0.30
16	3590	05/09/90	U-CR	.	0.29
17	3884	11/29/90	U-CR	.	0.29
18	1761	11/04/81	U-ELK.	.	0.28
19	1326	01/06/82	D (NPR1)	21.9	0.27
20	3212	08/22/90	U-CR	.	0.27
21	3713	11/29/90		.	0.27
22	1348#1	12/22/81	D (NPR1)	17.6	0.25
23	1425	12/23/81	D (NPR1)	16.2	0.25
24	1320	12/23/81	U (NPR1)	17.7	0.24
25	1419	11/19/81	D (NPR1)	25.3	0.24
26	1731	09/03/81	D (NPR1)	21.5	0.24
27	1733	09/02/81	D (NPR1)	21.5	0.24
28	3393	09/19/90	U-CR	.	0.24
29	3859	08/03/90	U-CR	.	0.24
30	1304	12/29/81	U (NPR1)	3.4	0.23
31	3562	06/16/90	D (NPR2)	34.6	0.23
32	3818	04/25/90	U-CR	.	0.23
33	1756	11/04/81	U-ELK.	.	0.22
34	1759	11/04/81	U-ELK.	.	0.22
35	2065	08/03/82	D (NPR1)	17.6	0.22
36	3868	10/02/90	U-CR	.	0.22
37	1424	12/22/81	D (NPR1)	18.0	0.21
38	1745	09/01/81	U (NPR1)	13.7	0.21
39	3684	08/23/90	D (NPR2)	50.7	0.21
40	4704	12/15/90	D (NPR2)	25.6	0.21
41	1309	11/19/81	D (NPR1)	19.3	0.20
42	1345	12/22/81	U (NPR1)	13.8	0.20
43	1784	12/23/83	U (NPR1)	14.1	0.20
44	3250	07/27/90	U (NPR1)	3.0	0.20
45	3808	08/08/90	U-CR	.	0.20
46	1644	08/25/81	U (NPR1)	13.7	0.19
47	4616	12/05/90		.	0.19
48	1758	11/04/81	U-ELK.	.	0.18
49	2063	08/03/82	D (NPR1)	17.6	0.18

OBS	FOX_ID	DATE	SITE	AVGDIST	TH
50	125	12/22/81	U (NPR1)	3.0	0.16
51	1324	09/02/81	D (NPR1)	21.9	0.16
52	1408	12/23/81	D (NPR1)	21.4	0.16
53	1423	12/23/81	D (NPR1)	16.2	0.16
54	1725	09/01/81	D (NPR1)	20.5	0.16
55	4328	08/22/90	D (NPR2)	37.4	0.16
56	4385#2	12/12/90	D (NPR2)	48.1	0.16
57	4654	12/07/90	D (NPR1)	17.9	0.16
58	1611	12/22/81	D (NPR1)	17.9	0.15
59	3784#2	11/28/90	U (NPR1)	2.6	0.15
60	3290	07/25/90	U (NPR1)	3.0	0.14
61	3784#1	08/03/90	U (NPR1)	3.7	0.14
62	3883	08/01/90	U-CR	.	0.14
63	4343	12/15/90	D (NPR2)	27.7	0.14
64	1736	09/03/81	D (NPR1)	21.4	0.13
65	4106	07/31/90	U-CR	.	0.13
66	4703	12/13/90	D (NPR2)	26.6	0.13
67	136	12/15/81	U (NPR1)	3.1	0.12
68	4073	05/09/90	U (NPR1)	27.3	0.12
69	4353	07/31/90	U (NPR1)	.	0.12
70	1314	12/18/81	U (NPR1)	7.0	0.11
71	3612	04/26/90	U (NPR1)	.	0.11
72	3700	12/12/90	D (NPR2)	41.8	0.11
73	4373#2	08/16/90	D (NPR1)	17.6	0.11
74	4380#2	12/18/90	U (NPR1)	6.1	0.11
75	1776	12/15/81	U (NPR1)	5.7	0.10
76	3989	12/06/90	D (NPR1)	24.0	0.10
77	4640	08/22/90	D (NPR2)	50.7	0.10
78	3792	08/24/90	D (NPR2)	28.9	0.09
79	4335	12/14/90		.	0.09
80	4373#1	05/09/90	D (NPR1)	17.6	0.09
81	4682	08/16/90	D (NPR2)	26.0	0.09
82	1348#2	08/03/82	D (NPR1)	17.6	0.08
83	3180	12/15/90	D (NPR2)	31.3	0.08
84	4663#2	12/11/90		.	0.08
85	4307	08/03/90		.	0.07
86	4313	07/25/90	U (NPR1)	12.3	0.07
87	4326	08/07/90		.	0.07
88	4626	07/24/90	U (NPR1)	2.7	0.07
89	4306	08/01/90	U (NPR1)	4.5	0.06
90	4025	07/25/90	U (NPR1)	3.3	0.04
91	4304	07/25/90	U (NPR1)	16.4	0.04
92	4355	08/01/90	U (NPR1)	1.0	-0.01
93	4380#1	08/09/90	U (NPR1)	10.3	-0.01

OBS	FOX_ID	DATE	SITE	AVGDIST	TI
1	1318	12/29/81	D (NPR1)	17.4	120.0
2	3589	05/10/90	U-CR	.	114.0
3	3845	04/26/90	U-CR	.	106.0
4	1757	11/04/81	U-ELK.	.	94.0
5	1771	11/04/81	U-ELK.	.	86.0
6	3727	10/12/90	U-CR	.	83.0
7	3895	10/19/90	U-CR	.	82.0
8	1326	01/06/82	D (NPR1)	21.9	81.3
9	3806	08/31/90	U-CR	.	81.0
10	1731	09/03/81	D (NPR1)	21.5	79.0
11	3893	06/12/90	U-CR	.	78.0
12	1320	12/23/81	U (NPR1)	17.7	74.2
13	3819	04/25/90	U-CR	.	72.0
14	1350	01/08/82	D (NPR1)	26.0	71.0
15	3399	10/05/90	U-CR	.	71.0
16	1348#1	12/22/81	D (NPR1)	17.6	69.0
17	1761	11/04/81	U-ELK.	.	69.0
18	1681	09/01/81	D (NPR1)	18.5	68.0
19	1756	11/04/81	U-ELK.	.	63.0
20	1784	12/23/83	U (NPR1)	14.1	62.8
21	3212	08/22/90	U-CR	.	59.0
22	3562	06/16/90	D (NPR2)	34.6	58.0
23	3713	11/29/90		.	58.0
24	1424	12/22/81	D (NPR1)	18.0	54.0
25	1345	12/22/81	U (NPR1)	13.8	53.6
26	3868	10/02/90	U-CR	.	53.0
27	1759	11/04/81	U-ELK.	.	52.0
28	1425	12/23/81	D (NPR1)	16.2	51.0
29	3393	09/19/90	U-CR	.	51.0
30	3684	08/23/90	D (NPR2)	50.7	51.0
31	1304	12/29/81	U (NPR1)	3.4	50.0
32	1644	08/25/81	U (NPR1)	13.7	50.0
33	1324	09/02/81	D (NPR1)	21.9	49.2
34	1733	09/02/81	D (NPR1)	21.5	49.0
35	3590	05/09/90	U-CR	.	49.0
36	3810	08/02/90	U-CR	.	49.0
37	1408	12/23/81	D (NPR1)	21.4	47.4
38	1309	11/19/81	D (NPR1)	19.3	46.0
39	2065	08/03/82	D (NPR1)	17.6	46.0
40	3250	07/27/90	U (NPR1)	3.0	46.0
41	1758	11/04/81	U-ELK.	.	44.0
42	1419	11/19/81	D (NPR1)	25.3	43.0
43	3859	08/03/90	U-CR	.	43.0
44	3884	11/29/90	U-CR	.	43.0
45	1314	12/18/81	U (NPR1)	7.0	42.4
46	4385#2	12/12/90	D (NPR2)	48.1	42.0
47	3808	08/08/90	U-CR	.	41.0
48	4328	08/22/90	D (NPR2)	37.4	41.0
49	136	12/15/81	U (NPR1)	3.1	39.8

OBS	FOX_ID	DATE	SITE	AVGDIST	TI
50	4616	12/05/90		.	39.0
51	4704	12/15/90	D (NPR2)	25.6	39.0
52	4073	05/09/90	U (NPR1)	27.3	37.0
53	3784#2	11/28/90	U (NPR1)	2.6	36.0
54	4343	12/15/90	D (NPR2)	27.7	36.0
55	1611	12/22/81	D (NPR1)	17.9	35.0
56	1725	09/01/81	D (NPR1)	20.5	35.0
57	3989	12/06/90	D (NPR1)	24.0	30.0
58	4654	12/07/90	D (NPR1)	17.9	29.0
59	3818	04/25/90	U-CR	.	28.0
60	2063	08/03/82	D (NPR1)	17.6	27.0
61	1776	12/15/81	U (NPR1)	5.7	26.5
62	3700	12/12/90	D (NPR2)	41.8	25.0
63	3784#1	08/03/90	U (NPR1)	3.7	25.0
64	3792	08/24/90	D (NPR2)	28.9	25.0
65	1423	12/23/81	D (NPR1)	16.2	23.0
66	125	12/22/81	U (NPR1)	3.0	22.5
67	4335	12/14/90		.	21.0
68	3290	07/25/90	U (NPR1)	3.0	19.0
69	4373#2	08/16/90	D (NPR1)	17.6	19.0
70	3180	12/15/90	D (NPR2)	31.3	18.0
71	4703	12/13/90	D (NPR2)	26.6	18.0
72	3883	08/01/90	U-CR	.	17.0
73	4106	07/31/90	U-CR	.	17.0
74	3612	04/26/90	U (NPR1)	.	16.0
75	4380#2	12/18/90	U (NPR1)	6.1	14.0
76	1348#2	08/03/82	D (NPR1)	17.6	-10.0
77	1736	09/03/81	D (NPR1)	21.4	-10.0
78	1745	09/01/81	U (NPR1)	13.7	-10.0
79	4025	07/25/90	U (NPR1)	3.3	-10.0
80	4304	07/25/90	U (NPR1)	16.4	-10.0
81	4306	08/01/90	U (NPR1)	4.5	-10.0
82	4307	08/03/90		.	-10.0
83	4313	07/25/90	U (NPR1)	12.3	-10.0
84	4326	08/07/90		.	-10.0
85	4353	07/31/90	U (NPR1)	.	-10.0
86	4355	08/01/90	U (NPR1)	1.0	-10.0
87	4373#1	05/09/90	D (NPR1)	17.6	-10.0
88	4380#1	08/09/90	U (NPR1)	10.3	-10.0
89	4626	07/24/90	U (NPR1)	2.7	-10.0
90	4640	08/22/90	D (NPR2)	50.7	-10.0
91	4663#2	12/11/90		.	-10.0
92	4682	08/16/90	D (NPR2)	26.0	-10.0
93	3817	08/28/90	U-CR	.	-30.0

OBS	FOX_ID	DATE	SITE	AVGDIST	U
1	1326	01/06/82	D (NPR1)	21.9	1.30
2	4385#2	12/12/90	D (NPR2)	48.1	1.00
3	1318	12/29/81	D (NPR1)	17.4	0.33
4	1776	12/15/81	U (NPR1)	5.7	0.33
5	1350	01/08/82	D (NPR1)	26.0	0.27
6	1681	09/01/81	D (NPR1)	18.5	0.23
7	3700	12/12/90	D (NPR2)	41.8	0.21
8	4640	08/22/90	D (NPR2)	50.7	0.21
9	4654	12/07/90	D (NPR1)	17.9	0.21
10	1644	08/25/81	U (NPR1)	13.7	0.20
11	4616	12/05/90		.	0.20
12	4704	12/15/90	D (NPR2)	25.6	0.20
13	3713	11/29/90		.	0.19
14	1309	11/19/81	D (NPR1)	19.3	0.18
15	1324	09/02/81	D (NPR1)	21.9	0.16
16	1419	11/19/81	D (NPR1)	25.3	0.15
17	1425	12/23/81	D (NPR1)	16.2	0.15
18	1731	09/03/81	D (NPR1)	21.5	0.15
19	3784#2	11/28/90	U (NPR1)	2.6	0.15
20	1725	09/01/81	D (NPR1)	20.5	0.14
21	1733	09/02/81	D (NPR1)	21.5	0.14
22	1757	11/04/81	U-ELK.	.	0.14
23	3784#1	08/03/90	U (NPR1)	3.7	0.14
24	3250	07/27/90	U (NPR1)	3.0	0.12
25	3562	06/16/90	D (NPR2)	34.6	0.12
26	1345	12/22/81	U (NPR1)	13.8	0.11
27	1348#1	12/22/81	D (NPR1)	17.6	0.11
28	1423	12/23/81	D (NPR1)	16.2	0.10
29	1304	12/29/81	U (NPR1)	3.4	0.09
30	1320	12/23/81	U (NPR1)	17.7	0.09
31	1611	12/22/81	D (NPR1)	17.9	0.09
32	1756	11/04/81	U-ELK.	.	0.09
33	1761	11/04/81	U-ELK.	.	0.09
34	1408	12/23/81	D (NPR1)	21.4	0.08
35	1745	09/01/81	U (NPR1)	13.7	0.08
36	1771	11/04/81	U-ELK.	.	0.08
37	1784	12/23/83	U (NPR1)	14.1	0.08
38	4353	07/31/90	U (NPR1)	.	0.08
39	125	12/22/81	U (NPR1)	3.0	0.07
40	1736	09/03/81	D (NPR1)	21.4	0.07
41	1759	11/04/81	U-ELK.	.	0.07
42	2065	08/03/82	D (NPR1)	17.6	0.07
43	4073	05/09/90	U (NPR1)	27.3	0.07
44	4328	08/22/90	D (NPR2)	37.4	0.07
45	4380#1	08/09/90	U (NPR1)	10.3	0.07
46	4380#2	12/18/90	U (NPR1)	6.1	0.06
47	4307	08/03/90		.	0.05
48	4335	12/14/90		.	0.05
49	4373#2	08/16/90	D (NPR1)	17.6	0.05

OBS	FOX_ID	DATE	SITE	AVGDIST	U
50	1314	12/18/81	U (NPR1)	7.0	0.04
51	136	12/15/81	U (NPR1)	3.1	0.04
52	1348#2	08/03/82	D (NPR1)	17.6	-0.01
53	1424	12/22/81	D (NPR1)	18.0	-0.01
54	1758	11/04/81	U-ELK.	.	-0.01
55	2063	08/03/82	D (NPR1)	17.6	-0.01
56	3180	12/15/90	D (NPR2)	31.3	-0.01
57	3212	08/22/90	U-CR	.	-0.01
58	3290	07/25/90	U (NPR1)	3.0	-0.01
59	3399	10/05/90	U-CR	.	-0.01
60	3612	04/26/90	U (NPR1)	.	-0.01
61	3684	08/23/90	D (NPR2)	50.7	-0.01
62	3727	10/12/90	U-CR	.	-0.01
63	3792	08/24/90	D (NPR2)	28.9	-0.01
64	3859	08/03/90	U-CR	.	-0.01
65	3868	10/02/90	U-CR	.	-0.01
66	3895	10/19/90	U-CR	.	-0.01
67	3989	12/06/90	D (NPR1)	24.0	-0.01
68	4025	07/25/90	U (NPR1)	3.3	-0.01
69	4304	07/25/90	U (NPR1)	16.4	-0.01
70	4306	08/01/90	U (NPR1)	4.5	-0.01
71	4313	07/25/90	U (NPR1)	12.3	-0.01
72	4326	08/07/90		.	-0.01
73	4343	12/15/90	D (NPR2)	27.7	-0.01
74	4355	08/01/90	U (NPR1)	1.0	-0.01
75	4373#1	05/09/90	D (NPR1)	17.6	-0.01
76	4626	07/24/90	U (NPR1)	2.7	-0.01
77	4663#2	12/11/90		.	-0.01
78	4682	08/16/90	D (NPR2)	26.0	-0.01
79	4703	12/13/90	D (NPR2)	26.6	-0.01
80	3393	09/19/90	U-CR	.	-0.02
81	3589	05/10/90	U-CR	.	-0.02
82	3590	05/09/90	U-CR	.	-0.02
83	3808	08/08/90	U-CR	.	-0.02
84	3810	08/02/90	U-CR	.	-0.02
85	3818	04/25/90	U-CR	.	-0.02
86	3819	04/25/90	U-CR	.	-0.02
87	3845	04/26/90	U-CR	.	-0.02
88	3806	08/31/90	U-CR	.	-0.03
89	3883	08/01/90	U-CR	.	-0.03
90	3884	11/29/90	U-CR	.	-0.03
91	3893	06/12/90	U-CR	.	-0.03
92	4106	07/31/90	U-CR	.	-0.05
93	3817	08/28/90	U-CR	.	-0.19

OBS	FOX_ID	DATE	SITE	AVGDIST	V
1	1326	01/06/82	D (NPR1)	21.9	11.5
2	1324	09/02/81	D (NPR1)	21.9	10.2
3	1345	12/22/81	U (NPR1)	13.8	8.6
4	1320	12/23/81	U (NPR1)	17.7	7.6
5	1314	12/18/81	U (NPR1)	7.0	7.3
6	1784	12/23/83	U (NPR1)	14.1	6.5
7	1408	12/23/81	D (NPR1)	21.4	5.7
8	125	12/22/81	U (NPR1)	3.0	5.0
9	136	12/15/81	U (NPR1)	3.1	5.0
10	1318	12/29/81	D (NPR1)	17.4	4.9
11	3845	04/26/90	U-CR	.	4.4
12	3589	05/10/90	U-CR	.	4.3
13	1350	01/08/82	D (NPR1)	26.0	3.9
14	1776	12/15/81	U (NPR1)	5.7	3.8
15	1757	11/04/81	U-ELK.	.	3.6
16	3893	06/12/90	U-CR	.	3.6
17	3727	10/12/90	U-CR	.	3.3
18	3806	08/31/90	U-CR	.	3.3
19	3895	10/19/90	U-CR	.	3.3
20	3562	06/16/90	D (NPR2)	34.6	3.2
21	1756	11/04/81	U-ELK.	.	3.1
22	3819	04/25/90	U-CR	.	3.1
23	1761	11/04/81	U-ELK.	.	2.8
24	1771	11/04/81	U-ELK.	.	2.7
25	3684	08/23/90	D (NPR2)	50.7	2.7
26	4385#2	12/12/90	D (NPR2)	48.1	2.7
27	4616	12/05/90		.	2.6
28	4704	12/15/90	D (NPR2)	25.6	2.6
29	1681	09/01/81	D (NPR1)	18.5	2.5
30	1759	11/04/81	U-ELK.	.	2.5
31	3399	10/05/90	U-CR	.	2.5
32	3590	05/09/90	U-CR	.	2.5
33	4073	05/09/90	U (NPR1)	27.3	2.5
34	1309	11/19/81	D (NPR1)	19.3	2.4
35	1731	09/03/81	D (NPR1)	21.5	2.4
36	1419	11/19/81	D (NPR1)	25.3	2.3
37	3713	11/29/90		.	2.3
38	1304	12/29/81	U (NPR1)	3.4	2.2
39	1758	11/04/81	U-ELK.	.	2.2
40	3212	08/22/90	U-CR	.	2.2
41	1348#1	12/22/81	D (NPR1)	17.6	2.1
42	1425	12/23/81	D (NPR1)	16.2	2.1
43	3859	08/03/90	U-CR	.	2.0
44	1424	12/22/81	D (NPR1)	18.0	1.9
45	3393	09/19/90	U-CR	.	1.9
46	3810	08/02/90	U-CR	.	1.9
47	4373#2	08/16/90	D (NPR1)	17.6	1.8
48	1733	09/02/81	D (NPR1)	21.5	1.7
49	2065	08/03/82	D (NPR1)	17.6	1.7

OBS	FOX_ID	DATE	SITE	AVGDIST	V
50	4328	08/22/90	D (NPR2)	37.4	1.7
51	3784#2	11/28/90	U (NPR1)	2.6	1.6
52	3808	08/08/90	U-CR	.	1.6
53	3884	11/29/90	U-CR	.	1.6
54	1611	12/22/81	D (NPR1)	17.9	1.5
55	1644	08/25/81	U (NPR1)	13.7	1.4
56	3250	07/27/90	U (NPR1)	3.0	1.4
57	3700	12/12/90	D (NPR2)	41.8	1.4
58	3817	08/28/90	U-CR	.	1.4
59	3818	04/25/90	U-CR	.	1.4
60	4343	12/15/90	D (NPR2)	27.7	1.4
61	1423	12/23/81	D (NPR1)	16.2	1.3
62	1725	09/01/81	D (NPR1)	20.5	1.3
63	3883	08/01/90	U-CR	.	1.3
64	4106	07/31/90	U-CR	.	1.3
65	2063	08/03/82	D (NPR1)	17.6	1.2
66	3612	04/26/90	U (NPR1)	.	1.2
67	3784#1	08/03/90	U (NPR1)	3.7	1.2
68	4335	12/14/90		.	1.0
69	4654	12/07/90	D (NPR1)	17.9	1.0
70	4703	12/13/90	D (NPR2)	26.6	1.0
71	1736	09/03/81	D (NPR1)	21.4	0.9
72	3792	08/24/90	D (NPR2)	28.9	0.9
73	4640	08/22/90	D (NPR2)	50.7	0.9
74	4682	08/16/90	D (NPR2)	26.0	0.9
75	1745	09/01/81	U (NPR1)	13.7	0.8
76	3290	07/25/90	U (NPR1)	3.0	0.8
77	3989	12/06/90	D (NPR1)	24.0	0.8
78	4373#1	05/09/90	D (NPR1)	17.6	0.8
79	4380#2	12/18/90	U (NPR1)	6.1	0.7
80	1348#2	08/03/82	D (NPR1)	17.6	0.6
81	3180	12/15/90	D (NPR2)	31.3	0.6
82	4353	07/31/90	U (NPR1)	.	0.6
83	4663#2	12/11/90		.	0.6
84	4307	08/03/90		.	0.5
85	4313	07/25/90	U (NPR1)	12.3	0.5
86	4380#1	08/09/90	U (NPR1)	10.3	0.5
87	4304	07/25/90	U (NPR1)	16.4	0.4
88	4306	08/01/90	U (NPR1)	4.5	0.4
89	4326	08/07/90		.	0.4
90	4025	07/25/90	U (NPR1)	3.3	0.3
91	4355	08/01/90	U (NPR1)	1.0	0.3
92	4626	07/24/90	U (NPR1)	2.7	0.3
93	3868	10/02/90	U-CR	.	-0.1

OBS	FOX_ID	DATE	SITE	AVGDIST	W
1	1611	12/22/81	D (NPR1)	17.9	0.66
2	2063	08/03/82	D (NPR1)	17.6	0.34
3	1350	01/08/82	D (NPR1)	26.0	0.15
4	3684	08/23/90	D (NPR2)	50.7	0.14
5	1318	12/29/81	D (NPR1)	17.4	0.12
6	4616	12/05/90		.	0.12
7	4704	12/15/90	D (NPR2)	25.6	0.12
8	1326	01/06/82	D (NPR1)	21.9	0.11
9	1731	09/03/81	D (NPR1)	21.5	0.10
10	3393	09/19/90	U-CR	.	0.10
11	3589	05/10/90	U-CR	.	0.09
12	3590	05/09/90	U-CR	.	0.09
13	3612	04/26/90	U (NPR1)	.	0.09
14	3845	04/26/90	U-CR	.	0.09
15	2065	08/03/82	D (NPR1)	17.6	0.08
16	3819	04/25/90	U-CR	.	0.08
17	3868	10/02/90	U-CR	.	0.08
18	3727	10/12/90	U-CR	.	0.07
19	1309	11/19/81	D (NPR1)	19.3	0.05
20	1320	12/23/81	U (NPR1)	17.7	0.05
21	1408	12/23/81	D (NPR1)	21.4	0.05
22	4073	05/09/90	U (NPR1)	27.3	0.05
23	1324	09/02/81	D (NPR1)	21.9	0.04
24	136	12/15/81	U (NPR1)	3.1	0.04
25	1345	12/22/81	U (NPR1)	13.8	0.03
26	1784	12/23/83	U (NPR1)	14.1	0.03
27	1314	12/18/81	U (NPR1)	7.0	0.02
28	125	12/22/81	U (NPR1)	3.0	-0.01
29	1776	12/15/81	U (NPR1)	5.7	-0.01
30	1304	12/29/81	U (NPR1)	3.4	-0.05
31	1348#1	12/22/81	D (NPR1)	17.6	-0.05
32	1348#2	08/03/82	D (NPR1)	17.6	-0.05
33	1419	11/19/81	D (NPR1)	25.3	-0.05
34	1423	12/23/81	D (NPR1)	16.2	-0.05
35	1424	12/22/81	D (NPR1)	18.0	-0.05
36	1425	12/23/81	D (NPR1)	16.2	-0.05
37	1644	08/25/81	U (NPR1)	13.7	-0.05
38	1681	09/01/81	D (NPR1)	18.5	-0.05
39	1725	09/01/81	D (NPR1)	20.5	-0.05
40	1733	09/02/81	D (NPR1)	21.5	-0.05
41	1736	09/03/81	D (NPR1)	21.4	-0.05
42	1745	09/01/81	U (NPR1)	13.7	-0.05
43	1756	11/04/81	U-ELK.	.	-0.05
44	1757	11/04/81	U-ELK.	.	-0.05
45	1758	11/04/81	U-ELK.	.	-0.05
46	1759	11/04/81	U-ELK.	.	-0.05
47	1761	11/04/81	U-ELK.	.	-0.05
48	1771	11/04/81	U-ELK.	.	-0.05
49	3180	12/15/90	D (NPR2)	31.3	-0.05

OBS	FOX_ID	DATE	SITE	AVGDIST	W
50	3212	08/22/90	U-CR	.	-0.05
51	3250	07/27/90	U (NPR1)	3.0	-0.05
52	3290	07/25/90	U (NPR1)	3.0	-0.05
53	3399	10/05/90	U-CR	.	-0.05
54	3562	06/16/90	D (NPR2)	34.6	-0.05
55	3700	12/12/90	D (NPR2)	41.8	-0.05
56	3713	11/29/90		.	-0.05
57	3784#1	08/03/90	U (NPR1)	3.7	-0.05
58	3784#2	11/28/90	U (NPR1)	2.6	-0.05
59	3792	08/24/90	D (NPR2)	28.9	-0.05
60	3806	08/31/90	U-CR	.	-0.05
61	3808	08/08/90	U-CR	.	-0.05
62	3810	08/02/90	U-CR	.	-0.05
63	3817	08/28/90	U-CR	.	-0.05
64	3818	04/25/90	U-CR	.	-0.05
65	3859	08/03/90	U-CR	.	-0.05
66	3883	08/01/90	U-CR	.	-0.05
67	3884	11/29/90	U-CR	.	-0.05
68	3893	06/12/90	U-CR	.	-0.05
69	3895	10/19/90	U-CR	.	-0.05
70	3989	12/06/90	D (NPR1)	24.0	-0.05
71	4025	07/25/90	U (NPR1)	3.3	-0.05
72	4106	07/31/90	U-CR	.	-0.05
73	4304	07/25/90	U (NPR1)	16.4	-0.05
74	4306	08/01/90	U (NPR1)	4.5	-0.05
75	4307	08/03/90		.	-0.05
76	4313	07/25/90	U (NPR1)	12.3	-0.05
77	4326	08/07/90		.	-0.05
78	4328	08/22/90	D (NPR2)	37.4	-0.05
79	4335	12/14/90		.	-0.05
80	4343	12/15/90	D (NPR2)	27.7	-0.05
81	4353	07/31/90	U (NPR1)	.	-0.05
82	4355	08/01/90	U (NPR1)	1.0	-0.05
83	4373#1	05/09/90	D (NPR1)	17.6	-0.05
84	4373#2	08/16/90	D (NPR1)	17.6	-0.05
85	4380#1	08/09/90	U (NPR1)	10.3	-0.05
86	4380#2	12/18/90	U (NPR1)	6.1	-0.05
87	4385#2	12/12/90	D (NPR2)	48.1	-0.05
88	4626	07/24/90	U (NPR1)	2.7	-0.05
89	4640	08/22/90	D (NPR2)	50.7	-0.05
90	4654	12/07/90	D (NPR1)	17.9	-0.05
91	4663#2	12/11/90		.	-0.05
92	4682	08/16/90	D (NPR2)	26.0	-0.05
93	4703	12/13/90	D (NPR2)	26.6	-0.05

OBS	FOX_ID	DATE	SITE	AVGDIST	YB
1	3589	05/10/90	U-CR	.	0.082
2	3810	08/02/90	U-CR	.	0.082
3	3819	04/25/90	U-CR	.	0.075
4	3895	10/19/90	U-CR	.	0.074
5	3727	10/12/90	U-CR	.	0.072
6	3806	08/31/90	U-CR	.	0.072
7	1318	12/29/81	D (NPR1)	17.4	0.068
8	3845	04/26/90	U-CR	.	0.066
9	3399	10/05/90	U-CR	.	0.060
10	3212	08/22/90	U-CR	.	0.058
11	3884	11/29/90	U-CR	.	0.056
12	3590	05/09/90	U-CR	.	0.054
13	1757	11/04/81	U-ELK.	.	0.051
14	3893	06/12/90	U-CR	.	0.050
15	3868	10/02/90	U-CR	.	0.046
16	4616	12/05/90		.	0.045
17	1348#1	12/22/81	D (NPR1)	17.6	0.043
18	1761	11/04/81	U-ELK.	.	0.043
19	1350	01/08/82	D (NPR1)	26.0	0.042
20	3859	08/03/90	U-CR	.	0.042
21	1731	09/03/81	D (NPR1)	21.5	0.041
22	1771	11/04/81	U-ELK.	.	0.041
23	1681	09/01/81	D (NPR1)	18.5	0.039
24	1320	12/23/81	U (NPR1)	17.7	0.038
25	3250	07/27/90	U (NPR1)	3.0	0.038
26	3562	06/16/90	D (NPR2)	34.6	0.037
27	1326	01/06/82	D (NPR1)	21.9	0.035
28	3713	11/29/90		.	0.035
29	1424	12/22/81	D (NPR1)	18.0	0.034
30	3818	04/25/90	U-CR	.	0.034
31	1304	12/29/81	U (NPR1)	3.4	0.033
32	1756	11/04/81	U-ELK.	.	0.033
33	3393	09/19/90	U-CR	.	0.033
34	1733	09/02/81	D (NPR1)	21.5	0.032
35	2065	08/03/82	D (NPR1)	17.6	0.032
36	3684	08/23/90	D (NPR2)	50.7	0.031
37	3808	08/08/90	U-CR	.	0.031
38	1324	09/02/81	D (NPR1)	21.9	0.029
39	1345	12/22/81	U (NPR1)	13.8	0.027
40	1784	12/23/83	U (NPR1)	14.1	0.026
41	4328	08/22/90	D (NPR2)	37.4	0.026
42	1644	08/25/81	U (NPR1)	13.7	0.025
43	1725	09/01/81	D (NPR1)	20.5	0.025
44	1759	11/04/81	U-ELK.	.	0.025
45	125	12/22/81	U (NPR1)	3.0	0.024
46	1309	11/19/81	D (NPR1)	19.3	0.024
47	1419	11/19/81	D (NPR1)	25.3	0.024
48	1758	11/04/81	U-ELK.	.	0.024
49	1314	12/18/81	U (NPR1)	7.0	0.023

OBS	FOX_ID	DATE	SITE	AVGDIST	YB
50	1423	12/23/81	D (NPR1)	16.2	0.023
51	1425	12/23/81	D (NPR1)	16.2	0.023
52	3883	08/01/90	U-CR	.	0.023
53	1408	12/23/81	D (NPR1)	21.4	0.020
54	3784#2	11/28/90	U (NPR1)	2.6	0.020
55	4343	12/15/90	D (NPR2)	27.7	0.020
56	4704	12/15/90	D (NPR2)	25.6	0.020
57	1348#2	08/03/82	D (NPR1)	17.6	0.019
58	3612	04/26/90	U (NPR1)	.	0.019
59	4654	12/07/90	D (NPR1)	17.9	0.019
60	136	12/15/81	U (NPR1)	3.1	0.018
61	1611	12/22/81	D (NPR1)	17.9	0.018
62	4385#2	12/12/90	D (NPR2)	48.1	0.017
63	4703	12/13/90	D (NPR2)	26.6	0.017
64	3700	12/12/90	D (NPR2)	41.8	0.016
65	3290	07/25/90	U (NPR1)	3.0	0.015
66	4373#2	08/16/90	D (NPR1)	17.6	0.015
67	3784#1	08/03/90	U (NPR1)	3.7	0.014
68	4313	07/25/90	U (NPR1)	12.3	0.012
69	4682	08/16/90	D (NPR2)	26.0	0.012
70	1776	12/15/81	U (NPR1)	5.7	0.011
71	3180	12/15/90	D (NPR2)	31.3	0.011
72	3989	12/06/90	D (NPR1)	24.0	0.011
73	3792	08/24/90	D (NPR2)	28.9	0.010
74	4335	12/14/90		.	0.010
75	4353	07/31/90	U (NPR1)	.	0.010
76	1745	09/01/81	U (NPR1)	13.7	-0.005
77	2063	08/03/82	D (NPR1)	17.6	-0.005
78	4025	07/25/90	U (NPR1)	3.3	-0.005
79	4073	05/09/90	U (NPR1)	27.3	-0.005
80	4304	07/25/90	U (NPR1)	16.4	-0.005
81	4306	08/01/90	U (NPR1)	4.5	-0.005
82	4307	08/03/90		.	-0.005
83	4326	08/07/90		.	-0.005
84	4355	08/01/90	U (NPR1)	1.0	-0.005
85	4373#1	05/09/90	D (NPR1)	17.6	-0.005
86	4380#1	08/09/90	U (NPR1)	10.3	-0.005
87	4380#2	12/18/90	U (NPR1)	6.1	-0.005
88	4626	07/24/90	U (NPR1)	2.7	-0.005
89	4663#2	12/11/90		.	-0.005
90	1736	09/03/81	D (NPR1)	21.4	-0.006
91	4106	07/31/90	U-CR	.	-0.006
92	4640	08/22/90	D (NPR2)	50.7	-0.016
93	3817	08/28/90	U-CR	.	-0.024

OBS	FOX_ID	DATE	SITE	AVGDIST	ZN
1	1324	09/02/81	D (NPR1)	21.9	220
2	2063	08/03/82	D (NPR1)	17.6	195
3	4626	07/24/90	U (NPR1)	2.7	181
4	3399	10/05/90	U-CR	.	180
5	4663#2	12/11/90		.	178
6	4703	12/13/90	D (NPR2)	26.6	178
7	4328	08/22/90	D (NPR2)	37.4	177
8	4654	12/07/90	D (NPR1)	17.9	176
9	3700	12/12/90	D (NPR2)	41.8	175
10	3818	04/25/90	U-CR	.	173
11	4682	08/16/90	D (NPR2)	26.0	171
12	1304	12/29/81	U (NPR1)	3.4	170
13	1326	01/06/82	D (NPR1)	21.9	170
14	1350	01/08/82	D (NPR1)	26.0	170
15	136	12/15/81	U (NPR1)	3.1	170
16	3393	09/19/90	U-CR	.	169
17	3817	08/28/90	U-CR	.	167
18	4704	12/15/90	D (NPR2)	25.6	166
19	4385#2	12/12/90	D (NPR2)	48.1	161
20	4616	12/05/90		.	161
21	1314	12/18/81	U (NPR1)	7.0	160
22	1419	11/19/81	D (NPR1)	25.3	159
23	1733	09/02/81	D (NPR1)	21.5	158
24	3859	08/03/90	U-CR	.	156
25	1736	09/03/81	D (NPR1)	21.4	155
26	3180	12/15/90	D (NPR2)	31.3	155
27	3562	06/16/90	D (NPR2)	34.6	155
28	1423	12/23/81	D (NPR1)	16.2	154
29	1681	09/01/81	D (NPR1)	18.5	154
30	1758	11/04/81	U-ELK.	.	154
31	3727	10/12/90	U-CR	.	154
32	1318	12/29/81	D (NPR1)	17.4	153
33	3250	07/27/90	U (NPR1)	3.0	153
34	1761	11/04/81	U-ELK.	.	152
35	1309	11/19/81	D (NPR1)	19.3	151
36	1348#1	12/22/81	D (NPR1)	17.6	151
37	3290	07/25/90	U (NPR1)	3.0	151
38	4343	12/15/90	D (NPR2)	27.7	151
39	125	12/22/81	U (NPR1)	3.0	150
40	1425	12/23/81	D (NPR1)	16.2	150
41	1745	09/01/81	U (NPR1)	13.7	150
42	3684	08/23/90	D (NPR2)	50.7	150
43	4373#1	05/09/90	D (NPR1)	17.6	150
44	3810	08/02/90	U-CR	.	148
45	1644	08/25/81	U (NPR1)	13.7	147
46	1759	11/04/81	U-ELK.	.	145
47	2065	08/03/82	D (NPR1)	17.6	145
48	3713	11/29/90		.	145
49	4335	12/14/90		.	145

OBS	FOX_ID	DATE	SITE	AVGDIST	ZN
50	4353	07/31/90	U (NPR1)	.	145
51	1611	12/22/81	D (NPR1)	17.9	144
52	3612	04/26/90	U (NPR1)	.	144
53	1757	11/04/81	U-ELK.	.	143
54	1771	11/04/81	U-ELK.	.	143
55	3212	08/22/90	U-CR	.	142
56	3806	08/31/90	U-CR	.	142
57	3808	08/08/90	U-CR	.	142
58	4355	08/01/90	U (NPR1)	1.0	142
59	4380#1	08/09/90	U (NPR1)	10.3	142
60	1348#2	08/03/82	D (NPR1)	17.6	141
61	1725	09/01/81	D (NPR1)	20.5	141
62	1408	12/23/81	D (NPR1)	21.4	140
63	1424	12/22/81	D (NPR1)	18.0	140
64	3883	08/01/90	U-CR	.	140
65	3884	11/29/90	U-CR	.	140
66	4106	07/31/90	U-CR	.	140
67	4373#2	08/16/90	D (NPR1)	17.6	140
68	4380#2	12/18/90	U (NPR1)	6.1	139
69	1731	09/03/81	D (NPR1)	21.5	138
70	4640	08/22/90	D (NPR2)	50.7	138
71	3895	10/19/90	U-CR	.	135
72	1756	11/04/81	U-ELK.	.	131
73	1320	12/23/81	U (NPR1)	17.7	130
74	1345	12/22/81	U (NPR1)	13.8	130
75	1784	12/23/83	U (NPR1)	14.1	130
76	3784#1	08/03/90	U (NPR1)	3.7	128
77	3989	12/06/90	D (NPR1)	24.0	125
78	3868	10/02/90	U-CR	.	123
79	3589	05/10/90	U-CR	.	122
80	1776	12/15/81	U (NPR1)	5.7	120
81	3784#2	11/28/90	U (NPR1)	2.6	120
82	4304	07/25/90	U (NPR1)	16.4	120
83	3792	08/24/90	D (NPR2)	28.9	118
84	4307	08/03/90		.	118
85	3590	05/09/90	U-CR	.	116
86	3845	04/26/90	U-CR	.	112
87	4073	05/09/90	U (NPR1)	27.3	110
88	4313	07/25/90	U (NPR1)	12.3	110
89	4326	08/07/90		.	108
90	4306	08/01/90	U (NPR1)	4.5	101
91	3893	06/12/90	U-CR	.	95
92	4025	07/25/90	U (NPR1)	3.3	93
93	3819	04/25/90	U-CR	.	87

APPENDIX B

Concentrations of elements in soil from kit fox home ranges, arranged by element, and sorted in decending order of concentration.

All concentrations are ppm except for gold, iridium, and mercury which are ppb. Negative signs indicate that the element was not detected; the number following a minus sign is the limit of detection.

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	AG
1	125	****	NPR	8R	NE	.	-0.2
2	126	****	NPR	12B	SE	.	-0.2
3	124	1309	NPR	34R	SE	19.3	-0.2
4	111	1314	NPR	10B	SW	7.0	-0.2
5	103	1326	NPR	6G	NE	21.9	-0.2
6	118	1350	NPR	31S	NE	26.0	-0.2
7	122	1403	NPR	33S	SW	.	-0.2
8	116	1419	NPR	34R	NE	25.3	-0.2
9	100	1423	NPR	8G	SE	16.2	-0.2
10	108	1731	NPR	27S	SW	21.5	-0.2
11	109	1733	NPR	27S	SW	21.5	-0.2
12	119	1736	NPR	29S	SW	21.4	-0.2
13	120	1745	NPR	12G	SW	13.7	-0.2
14	110	1776	NPR	10B	SE	5.7	-0.2
15	123	1784	NPR	32R	NE	14.1	-0.2
16	117	1833	NPR	3B	NW	3.4	-0.2
17	104	1835	NPR	5G	NW	22.4	-0.2
18	112	1839	NPR	32R	SE	6.2	-0.2
19	105	2022	NPR	18G	NW	19.8	-0.2
20	102	2063	NPR	17G	NE	17.6	-0.2
21	101	2065	NPR	17G	NE	17.6	-0.2
22	150	3212	CampR	3A	SW	.	-0.2
23	144	3393	CampR	2A	NE	.	-0.2
24	151	3399	CampR	10A	SE	.	-0.2
25	153	3806	CampR	8A	NW	.	-0.2
26	154	3817	CampR	8A	NW	.	-0.2
27	141	3819	CampR	17A	NE	.	-0.2
28	152	3859	CampR	9A	SE	.	-0.2
29	143	3868	CampR	14A	NW	.	-0.2
30	140	3883	CampR	16A	NW	.	-0.2
31	142	3893	CampR	17A	SE	.	-0.2
32	107	3989	NPR	25S	SE	24.0	-0.2
33	113	4025	NPR	32R	SW	3.3	-0.2
34	114	4313	NPR	8R	NE	12.3	-0.2
35	121	4355	NPR	17S	NW	1.0	-0.2
36	115	4380#1	NPR	12B	SE	10.3	-0.2
37	106	4654	NPR	25S	NE	17.9	-0.2

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	AS
1	118	1350	NPR	31S	NE	26.0	10
2	116	1419	NPR	34R	NE	25.3	10
3	125	****	NPR	8R	NE	.	9
4	113	4025	NPR	32R	SW	3.3	9
5	114	4313	NPR	8R	NE	12.3	9
6	100	1423	NPR	8G	SE	16.2	8
7	119	1736	NPR	29S	SW	21.4	8
8	120	1745	NPR	12G	SW	13.7	8
9	111	1314	NPR	10B	SW	7.0	7
10	103	1326	NPR	6G	NE	21.9	7
11	115	4380#1	NPR	12B	SE	10.3	7
12	126	****	NPR	12B	SE	.	6
13	124	1309	NPR	34R	SE	19.3	6
14	122	1403	NPR	33S	SW	.	6
15	108	1731	NPR	27S	SW	21.5	6
16	109	1733	NPR	27S	SW	21.5	6
17	117	1833	NPR	3B	NW	3.4	6
18	104	1835	NPR	5G	NW	22.4	6
19	112	1839	NPR	32R	SE	6.2	6
20	105	2022	NPR	18G	NW	19.8	6
21	101	2065	NPR	17G	NE	17.6	6
22	123	1784	NPR	32R	NE	14.1	5
23	102	2063	NPR	17G	NE	17.6	5
24	150	3212	CampR	3A	SW	.	5
25	144	3393	CampR	2A	NE	.	5
26	140	3883	CampR	16A	NW	.	5
27	107	3989	NPR	25S	SE	24.0	5
28	121	4355	NPR	17S	NW	1.0	5
29	106	4654	NPR	25S	NE	17.9	5
30	110	1776	NPR	10B	SE	5.7	4
31	151	3399	CampR	10A	SE	.	4
32	153	3806	CampR	8A	NW	.	4
33	154	3817	CampR	8A	NW	.	4
34	152	3859	CampR	9A	SE	.	4
35	141	3819	CampR	17A	NE	.	3
36	143	3868	CampR	14A	NW	.	3
37	142	3893	CampR	17A	SE	.	3

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	AU
1	103	1326	NPR	6G	NE	21.9	3
2	150	3212	CampR	3A	SW	.	3
3	144	3393	CampR	2A	NE	.	3
4	153	3806	CampR	8A	NW	.	3
5	141	3819	CampR	17A	NE	.	3
6	124	1309	NPR	34R	SE	19.3	2
7	118	1350	NPR	31S	NE	26.0	2
8	104	1835	NPR	5G	NW	22.4	2
9	151	3399	CampR	10A	SE	.	2
10	154	3817	CampR	8A	NW	.	2
11	125	****	NPR	8R	NE	.	-2
12	126	****	NPR	12B	SE	.	-2
13	111	1314	NPR	10B	SW	7.0	-2
14	122	1403	NPR	33S	SW	.	-2
15	116	1419	NPR	34R	NE	25.3	-2
16	100	1423	NPR	8G	SE	16.2	-2
17	108	1731	NPR	27S	SW	21.5	-2
18	109	1733	NPR	27S	SW	21.5	-2
19	119	1736	NPR	29S	SW	21.4	-2
20	120	1745	NPR	12G	SW	13.7	-2
21	110	1776	NPR	10B	SE	5.7	-2
22	123	1784	NPR	32R	NE	14.1	-2
23	117	1833	NPR	3B	NW	3.4	-2
24	112	1839	NPR	32R	SE	6.2	-2
25	105	2022	NPR	18G	NW	19.8	-2
26	102	2063	NPR	17G	NE	17.6	-2
27	101	2065	NPR	17G	NE	17.6	-2
28	152	3859	CampR	9A	SE	.	-2
29	143	3868	CampR	14A	NW	.	-2
30	140	3883	CampR	16A	NW	.	-2
31	142	3893	CampR	17A	SE	.	-2
32	107	3989	NPR	25S	SE	24.0	-2
33	113	4025	NPR	32R	SW	3.3	-2
34	114	4313	NPR	8R	NE	12.3	-2
35	121	4355	NPR	17S	NW	1.0	-2
36	115	4380#1	NPR	12B	SE	10.3	-2
37	106	4654	NPR	25S	NE	17.9	-2

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	BA
1	104	1835	NPR	5G	NW	22.4	1717
2	108	1731	NPR	27S	SW	21.5	1077
3	125	****	NPR	8R	NE	.	1026
4	106	4654	NPR	25S	NE	17.9	1024
5	141	3819	CampR	17A	NE	.	1003
6	121	4355	NPR	17S	NW	1.0	997
7	114	4313	NPR	8R	NE	12.3	990
8	110	1776	NPR	10B	SE	5.7	966
9	103	1326	NPR	6G	NE	21.9	961
10	122	1403	NPR	33S	SW	.	935
11	105	2022	NPR	18G	NW	19.8	931
12	142	3893	CampR	17A	SE	.	929
13	119	1736	NPR	29S	SW	21.4	927
14	109	1733	NPR	27S	SW	21.5	920
15	102	2063	NPR	17G	NE	17.6	919
16	100	1423	NPR	8G	SE	16.2	914
17	111	1314	NPR	10B	SW	7.0	913
18	107	3989	NPR	25S	SE	24.0	910
19	117	1833	NPR	3B	NW	3.4	898
20	152	3859	CampR	9A	SE	.	895
21	143	3868	CampR	14A	NW	.	891
22	120	1745	NPR	12G	SW	13.7	880
23	123	1784	NPR	32R	NE	14.1	874
24	112	1839	NPR	32R	SE	6.2	872
25	126	****	NPR	12B	SE	.	870
26	124	1309	NPR	34R	SE	19.3	868
27	115	4380#1	NPR	12B	SE	10.3	866
28	101	2065	NPR	17G	NE	17.6	865
29	118	1350	NPR	31S	NE	26.0	843
30	113	4025	NPR	32R	SW	3.3	821
31	151	3399	CampR	10A	SE	.	816
32	154	3817	CampR	8A	NW	.	816
33	153	3806	CampR	8A	NW	.	804
34	150	3212	CampR	3A	SW	.	771
35	144	3393	CampR	2A	NE	.	766
36	140	3883	CampR	16A	NW	.	752
37	116	1419	NPR	34R	NE	25.3	739

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	BR
1	104	1835	NPR	5G	NW	22.4	8.9
2	106	4654	NPR	25S	NE	17.9	8.1
3	103	1326	NPR	6G	NE	21.9	2.8
4	144	3393	CampR	2A	NE	.	2.7
5	111	1314	NPR	10B	SW	7.0	2.2
6	118	1350	NPR	31S	NE	26.0	2.1
7	123	1784	NPR	32R	NE	14.1	2.0
8	140	3883	CampR	16A	NW	.	2.0
9	122	1403	NPR	33S	SW	.	1.9
10	150	3212	CampR	3A	SW	.	1.9
11	116	1419	NPR	34R	NE	25.3	1.7
12	151	3399	CampR	10A	SE	.	1.6
13	108	1731	NPR	27S	SW	21.5	1.5
14	119	1736	NPR	29S	SW	21.4	1.5
15	120	1745	NPR	12G	SW	13.7	1.5
16	126	****	NPR	12B	SE	.	1.4
17	105	2022	NPR	18G	NW	19.8	1.4
18	152	3859	CampR	9A	SE	.	1.4
19	142	3893	CampR	17A	SE	.	1.3
20	121	4355	NPR	17S	NW	1.0	1.3
21	112	1839	NPR	32R	SE	6.2	1.2
22	154	3817	CampR	8A	NW	.	1.2
23	125	****	NPR	8R	NE	.	1.1
24	109	1733	NPR	27S	SW	21.5	1.1
25	141	3819	CampR	17A	NE	.	1.1
26	143	3868	CampR	14A	NW	.	1.1
27	100	1423	NPR	8G	SE	16.2	1.0
28	101	2065	NPR	17G	NE	17.6	1.0
29	113	4025	NPR	32R	SW	3.3	1.0
30	102	2063	NPR	17G	NE	17.6	0.9
31	115	4380#1	NPR	12B	SE	10.3	0.9
32	107	3989	NPR	25S	SE	24.0	0.8
33	117	1833	NPR	3B	NW	3.4	0.7
34	110	1776	NPR	10B	SE	5.7	0.6
35	124	1309	NPR	34R	SE	19.3	-0.5
36	153	3806	CampR	8A	NW	.	-0.5
37	114	4313	NPR	8R	NE	12.3	-0.5

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	CD
1	141	3819	CampR	17A	NE	.	1.4
2	111	1314	NPR	10B	SW	7.0	1.1
3	152	3859	CampR	9A	SE	.	1.0
4	143	3868	CampR	14A	NW	.	1.0
5	140	3883	CampR	16A	NW	.	1.0
6	142	3893	CampR	17A	SE	.	1.0
7	117	1833	NPR	3B	NW	3.4	0.8
8	150	3212	CampR	3A	SW	.	0.8
9	144	3393	CampR	2A	NE	.	0.8
10	151	3399	CampR	10A	SE	.	0.8
11	126	****	NPR	12B	SE	.	0.6
12	116	1419	NPR	34R	NE	25.3	0.6
13	120	1745	NPR	12G	SW	13.7	0.6
14	123	1784	NPR	32R	NE	14.1	0.6
15	153	3806	CampR	8A	NW	.	0.6
16	113	4025	NPR	32R	SW	3.3	0.6
17	124	1309	NPR	34R	SE	19.3	0.5
18	100	1423	NPR	8G	SE	16.2	0.5
19	109	1733	NPR	27S	SW	21.5	0.5
20	110	1776	NPR	10B	SE	5.7	0.5
21	105	2022	NPR	18G	NW	19.8	0.5
22	101	2065	NPR	17G	NE	17.6	0.5
23	115	4380#1	NPR	12B	SE	10.3	0.5
24	103	1326	NPR	6G	NE	21.9	0.4
25	118	1350	NPR	31S	NE	26.0	0.4
26	122	1403	NPR	33S	SW	.	0.4
27	108	1731	NPR	27S	SW	21.5	0.4
28	119	1736	NPR	29S	SW	21.4	0.4
29	104	1835	NPR	5G	NW	22.4	0.4
30	112	1839	NPR	32R	SE	6.2	0.4
31	102	2063	NPR	17G	NE	17.6	0.4
32	154	3817	CampR	8A	NW	.	0.4
33	106	4654	NPR	25S	NE	17.9	0.4
34	125	****	NPR	8R	NE	.	0.3
35	107	3989	NPR	25S	SE	24.0	0.3
36	114	4313	NP	8R	NE	12.3	0.3
37	121	4355	NPR	17S	NW	1.0	0.3

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	CE
1	126	****	NPR	12B	SE	.	52
2	116	1419	NPR	34R	NE	25.3	52
3	124	1309	NPR	34R	SE	19.3	50
4	122	1403	NPR	33S	SW	.	50
5	108	1731	NPR	27S	SW	21.5	50
6	144	3393	CampR	2A	NE	.	50
7	151	3399	CampR	10A	SE	.	50
8	118	1350	NPR	31S	NE	26.0	49
9	120	1745	NPR	12G	SW	13.7	49
10	102	2063	NPR	17G	NE	17.6	49
11	113	4025	NPR	32R	SW	3.3	49
12	115	4380#1	NPR	12B	SE	10.3	49
13	100	1423	NPR	8G	SE	16.2	48
14	101	2065	NPR	17G	NE	17.6	48
15	107	3989	NPR	25S	SE	24.0	48
16	121	4355	NPR	17S	NW	1.0	48
17	106	4654	NPR	25S	NE	17.9	48
18	119	1736	NPR	29S	SW	21.4	47
19	114	4313	NPR	8R	NE	12.3	47
20	123	1784	NPR	32R	NE	14.1	46
21	104	1835	NPR	5G	NW	22.4	46
22	109	1733	NPR	27S	SW	21.5	45
23	112	1839	NPR	32R	SE	6.2	45
24	142	3893	CampR	17A	SE	.	45
25	150	3212	CampR	3A	SW	.	44
26	140	3883	CampR	16A	NW	.	44
27	117	1833	NPR	3B	NW	3.4	43
28	153	3806	CampR	8A	NW	.	43
29	154	3817	CampR	8A	NW	.	43
30	125	****	NPR	8R	NE	.	42
31	152	3859	CampR	9A	SE	.	42
32	103	1326	NPR	6G	NE	21.9	41
33	141	3819	CampR	17A	NE	.	41
34	111	1314	NPR	10B	SW	7.0	40
35	105	2022	NPR	18G	NW	19.8	40
36	110	1776	NPR	10B	SE	5.7	39
37	143	3868	CampR	14A	NW	.	39

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	CO
1	154	3817	CampR	8A	NW	.	10.0
2	153	3806	CampR	8A	NW	.	9.9
3	140	3883	CampR	16A	NW	.	9.5
4	150	3212	CampR	3A	SW	.	9.2
5	144	3393	CampR	2A	NE	.	8.7
6	113	4025	NPR	32R	SW	3.3	8.4
7	126	****	NPR	12B	SE	.	7.9
8	116	1419	NPR	34R	NE	25.3	7.9
9	151	3399	CampR	10A	SE	.	7.8
10	114	4313	NPR	8R	NE	12.3	7.8
11	11[illegible]	1350	NPR	31S	NE	26.0	7.7
12	125	****	NPR	8R	NE	.	7.4
13	115	4380#1	NPR	12B	SE	10.3	7.4
14	124	1309	NPR	34R	SE	19.3	7.1
15	122	1403	NPR	33S	SW	.	6.9
16	123	1784	NPR	32R	NE	14.1	6.9
17	112	1839	NPR	32R	SE	6.2	6.8
18	152	3859	CampR	9A	SE	.	6.7
19	117	1833	NPR	3B	NW	3.4	6.2
20	142	3893	CampR	17A	SE	.	6.1
21	107	3989	NPR	25S	SE	24.0	6.0
22	108	1731	NPR	27S	SW	21.5	5.9
23	143	3868	CampR	14A	NW	.	5.9
24	121	4355	NPR	17S	NW	1.0	5.9
25	111	1314	NPR	10B	SW	7.0	5.8
26	109	1733	NPR	27S	SW	21.5	5.8
27	120	1745	NPR	12G	SW	13.7	5.8
28	101	2065	NPR	17G	NE	17.6	5.7
29	141	3819	CampR	17A	NE	.	5.6
30	119	1736	NPR	29S	SW	21.4	5.4
31	104	1835	NPR	5G	NW	22.4	5.4
32	102	2063	NPR	17G	NE	17.6	5.3
33	100	1423	NPR	8G	SE	16.2	5.1
34	103	1326	NPR	6G	NE	21.9	5.0
35	106	4654	NPR	25S	NE	17.9	4.9
36	110	1776	NPR	10B	SE	5.7	4.3
37	105	2022	NPR	18G	NW	19.8	4.3

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	CR
1	153	3806	CampR	8A	NW	.	200
2	154	3817	CampR	8A	NW	.	190
3	150	3212	CampR	3A	SW	.	130
4	144	3393	CampR	2A	NE	.	120
5	143	3868	CampR	14A	NW	.	94
6	140	3883	CampR	16A	NW	.	94
7	151	3399	CampR	10A	SE	.	88
8	152	3859	CampR	9A	SE	.	75
9	126	****	NPR	12B	SE	.	72
10	113	4025	NPR	32R	SW	3.3	69
11	112	1839	NPR	32R	SE	6.2	68
12	124	1309	NPR	34R	SE	19.3	63
13	116	1419	NPR	34R	NE	25.3	63
14	115	4380#1	NPR	12B	SE	10.3	63
15	142	3893	CampR	17A	SE	.	62
16	111	1314	NPR	10B	SW	7.0	61
17	141	3819	CampR	17A	NE	.	61
18	114	4313	NPR	8R	NE	12.3	60
19	118	1350	NPR	31S	NE	26.0	59
20	123	1784	NPR	32R	NE	14.1	58
21	122	1403	NPR	33S	SW	.	57
22	125	****	NPR	8R	NE	.	55
23	117	1833	NPR	3B	NW	3.4	55
24	100	1423	NPR	8G	SE	16.2	52
25	101	2065	NPR	17G	NE	17.6	52
26	119	1736	NPR	29S	SW	21.4	49
27	120	1745	NPR	12G	SW	13.7	48
28	102	2063	NPR	17G	NE	17.6	48
29	109	1733	NPR	27S	SW	21.5	47
30	121	4355	NPR	17S	NW	1.0	47
31	108	1731	NPR	27S	SW	21.5	45
32	104	1835	NPR	5G	NW	22.4	45
33	107	3989	NPR	25S	SE	24.0	44
34	103	1326	NPR	6G	NE	21.9	42
35	106	4654	NPR	25S	NE	17.9	42
36	110	1776	NPR	10B	SE	5.7	40
37	105	2022	NPR	18G	NW	19.8	35

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	CS
1	126	****	NPR	12B	SE	.	2.8
2	118	1350	NPR	31S	NE	26.0	2.8
3	125	****	NPR	8R	NE	.	2.7
4	111	1314	NPR	10B	SW	7.0	2.7
5	140	3883	CampR	16A	NW	.	2.7
6	113	4025	NPR	32R	SW	3.3	2.7
7	116	1419	NPR	34R	NE	25.3	2.6
8	114	4313	NPR	8R	NE	12.3	2.6
9	124	1309	NPR	34R	SE	19.3	2.5
10	122	1403	NPR	33S	SW	.	2.5
11	108	1731	NPR	27S	SW	21.5	2.5
12	123	1784	NPR	32R	NE	14.1	2.5
13	112	1839	NPR	32R	SE	6.2	2.5
14	115	4380#1	NPR	12B	SE	10.3	2.5
15	102	2063	NPR	17G	NE	17.6	2.4
16	100	1423	NPR	8G	SE	16.2	2.3
17	107	3989	NPR	25S	SE	24.0	2.3
18	106	4654	NPR	25S	NE	17.9	2.3
19	117	1833	NPR	3B	NW	3.4	2.2
20	101	2065	NPR	17G	NE	17.6	2.2
21	103	1326	NPR	6G	NE	21.9	2.1
22	119	1736	NPR	29S	SW	21.4	2.1
23	120	1745	NPR	12G	SW	13.7	2.1
24	110	1776	NPR	10B	SE	5.7	2.1
25	105	2022	NPR	18G	NW	19.8	2.1
26	150	3212	CampR	3A	SW	.	2.1
27	151	3399	CampR	10A	SE	.	2.1
28	153	3806	CampR	8A	NW	.	2.1
29	154	3817	CampR	8A	NW	.	2.1
30	141	3819	CampR	17A	NE	.	2.1
31	121	4355	NPR	17S	NW	1.0	2.1
32	109	1733	NPR	27S	SW	21.5	2.0
33	104	1835	NPR	5G	NW	22.4	2.0
34	144	3393	CampR	2A	NE	.	2.0
35	152	3859	CampR	9A	SE	.	2.0
36	142	3893	CampR	17A	SE	.	1.9
37	143	3868	CampR	14A	NW	.	1.7

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	CU
1	152	3859	CampR	9A	SE	.	23
2	140	3883	CampR	16A	NW	.	23
3	118	1350	NPR	31S	NE	26.0	20
4	150	3212	CampR	3A	SW	.	20
5	126	****	NPR	12B	SE	.	19
6	154	3817	CampR	8A	NW	.	19
7	113	4025	NPR	32R	SW	3.3	19
8	114	4313	NPR	8R	NE	12.3	19
9	115	4380#1	NPR	12B	SE	10.3	19
10	117	1833	NPR	3B	NW	3.4	18
11	112	1839	NPR	32R	SE	6.2	18
12	144	3393	CampR	2A	NE	.	18
13	151	3399	CampR	10A	SE	.	18
14	111	1314	NPR	10B	SW	7.0	17
15	116	1419	NPR	34R	NE	25.3	17
16	120	1745	NPR	12G	SW	13.7	17
17	123	1784	NPR	32R	NE	14.1	17
18	101	2065	NPR	17G	NE	17.6	17
19	153	3806	CampR	8A	NW	.	17
20	143	3868	CampR	14A	NW	.	17
21	125	****	NPR	8R	NE	.	16
22	124	1309	NPR	34R	SE	19.3	16
23	100	1423	NPR	8G	SE	16.2	16
24	104	1835	NPR	5G	NW	22.4	16
25	102	2063	NPR	17G	NE	17.6	16
26	141	3819	CampR	17A	NE	.	16
27	103	1326	NPR	6G	NE	21.9	15
28	122	1403	NPR	33S	SW	.	15
29	108	1731	NPR	27S	SW	21.5	15
30	119	1736	NPR	29S	SW	21.4	15
31	107	3989	NPR	25S	SE	24.0	15
32	121	4355	NPR	17S	NW	1.0	15
33	106	4654	NPR	25S	NE	17.9	15
34	109	1733	NPR	27S	SW	21.5	14
35	110	1776	NPR	10B	SE	5.7	14
36	105	2022	NPR	18G	NW	19.8	14
37	142	3893	CampR	17A	SE	.	14

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	EU
1	126	****	NPR	12B	SE	.	1.01
2	120	1745	NPR	12G	SW	13.7	0.97
3	122	1403	NPR	33S	SW	.	0.96
4	116	1419	NPR	34R	NE	25.3	0.96
5	124	1309	NPR	34R	SE	19.3	0.95
6	108	1731	NPR	27S	S	21.5	0.95
7	102	2063	NPR	17G	NE	17.6	0.94
8	107	3989	NPR	25S	SE	24.0	0.94
9	113	4025	NPR	32R	SW	3.3	0.94
10	114	4313	NPR	8R	NE	12.3	0.94
11	106	4654	NPR	25S	NE	17.9	0.94
12	118	1350	NPR	31S	NE	26.0	0.93
13	119	1736	NPR	29S	SW	21.4	0.92
14	151	3399	CampR	10A	SE	.	0.92
15	101	2065	NPR	17G	NE	17.6	0.91
16	109	1733	NPR	27S	SW	21.5	0.90
17	140	3883	CampR	16A	NW	.	0.90
18	121	4355	NPR	17S	NW	1.0	0.90
19	115	4380#1	NPR	12B	SE	10.3	0.90
20	125	****	NPR	8R	NE	.	0.89
21	144	3393	CampR	2A	NE	.	0.88
22	123	1784	NPR	32R	NE	14.1	0.87
23	112	1839	NPR	32R	SE	6.2	0.87
24	100	1423	NPR	8G	SE	16.2	0.86
25	104	1835	NPR	5G	NW	22.4	0.86
26	117	1833	NPR	3B	NW	3.4	0.85
27	150	3212	CampR	3A	SW	.	0.84
28	111	1314	NPR	10B	SW	7.0	0.82
29	103	1326	NPR	6G	NE	21.9	0.82
30	153	3806	CampR	8A	NW	.	0.82
31	142	3893	CampR	17A	SE	.	0.82
32	110	1776	NPR	10B	SE	5.7	0.81
33	105	2022	NPR	18G	NW	19.8	0.81
34	154	3817	CampR	8A	NW	.	0.81
35	152	3859	CampR	9A	SE	.	0.80
36	141	3819	CampR	17A	NE	.	0.74
37	143	3868	CampR	14A	NW	.	0.74

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	HF
1	141	3819	CampR	17A	NE	.	6.8
2	144	3393	CampR	2A	NE	.	6.7
3	142	3893	CampR	17A	SE	.	6.4
4	151	3399	CampR	10A	SE	.	6.3
5	154	3817	CampR	8A	NW	.	6.1
6	150	3212	CampR	3A	SW	.	6.0
7	153	3806	CampR	8A	NW	.	6.0
8	143	3868	CampR	14A	NW	.	6.0
9	126	****	NPR	12B	SE	.	5.9
10	124	1309	NPR	34R	SE	19.3	5.7
11	114	4313	NPR	8R	NE	12.3	5.5
12	112	1839	NPR	32R	SE	6.2	5.4
13	107	3989	NPR	25S	SE	24.0	5.3
14	113	4025	NPR	32R	SW	3.3	5.3
15	115	4380#1	NPR	12B	SE	10.3	5.3
16	125	****	NPR	8R	NE	.	5.2
17	108	1731	NPR	27S	SW	21.5	5.2
18	116	1419	NPR	34R	NE	25.3	5.1
19	102	2063	NPR	17G	NE	17.6	5.1
20	101	2065	NPR	17G	NE	17.6	5.1
21	152	3859	CampR	9A	SE	.	5.1
22	119	1736	NPR	29S	SW	21.4	4.8
23	120	1745	NPR	12G	SW	13.7	4.8
24	121	4355	NPR	17S	NW	1.0	4.8
25	111	1314	NPR	10B	SW	7.0	4.7
26	122	1403	NPR	33S	SW	.	4.7
27	109	1733	NPR	27S	SW	21.5	4.5
28	106	4654	NPR	25S	NE	17.9	4.5
29	118	1350	NPR	31S	NE	26.0	4.4
30	104	1835	NPR	5G	NW	22.4	4.4
31	105	2022	NPR	18G	NW	19.8	4.4
32	123	1784	NPR	32R	NE	14.1	4.2
33	117	1833	NPR	3B	NW	3.4	4.2
34	140	3883	CampR	16A	NW	.	4.2
35	100	1423	NPR	8G	SE	16.2	4.1
36	110	1776	NPR	10B	SE	5.7	4.1
37	103	1326	NPR	6G	NE	21.9	3.7

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	HG
1	154	3817	CampR	8A	NW	.	115
2	152	3859	CampR	9A	SE	.	110
3	153	3806	CampR	8A	NW	.	85
4	150	3212	CampR	3A	SW	.	45
5	140	3883	CampR	16A	NW	.	45
6	142	3893	CampR	17A	SE	.	40
7	144	3393	CampR	2A	NE	.	35
8	151	3399	CampR	10A	SE	.	35
9	143	3868	CampR	14A	NW	.	30
10	141	3819	CampR	17A	NE	.	25
11	125	****	NPR	8R	NE	.	20
12	118	1350	NPR	31S	NE	26.0	20
13	122	1403	NPR	33S	SW	.	20
14	119	1736	NPR	29S	SW	21.4	20
15	120	1745	NPR	12G	SW	13.7	20
16	104	1835	NPR	5G	NW	22.4	20
17	113	4025	NPR	32R	SW	3.3	20
18	111	1314	NPR	10B	SW	7.0	15
19	103	1326	NPR	6G	NE	21.9	15
20	116	1419	NPR	34R	NE	25.3	15
21	123	1784	NPR	32R	NE	14.1	15
22	114	4313	NPR	8R	NE	12.3	15
23	115	4380#1	NPR	12B	SE	10.3	15
24	126	****	NPR	12B	SE	.	10
25	124	1309	NPR	34R	SE	19.3	10
26	109	1733	NPR	27S	SW	21.5	10
27	110	1776	NPR	10B	SE	5.7	10
28	117	1833	NPR	3B	NW	3.4	10
29	102	2063	NPR	17G	NE	17.6	10
30	101	2065	NPR	17G	NE	17.6	10
31	121	4355	NPR	17S	NW	1.0	10
32	100	1423	NPR	8G	SE	16.2	5
33	108	1731	NPR	27S	SW	21.5	5
34	112	1839	NPR	32R	SE	6.2	5
35	105	2022	NPR	18G	NW	19.8	5
36	107	3989	NPR	25S	SE	24.0	5
37	106	4654	NPR	25S	NE	17.9	5

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	ID
1	125	****	NPR	8R	NE	.	-1
2	126	****	NPR	12B	SE	.	-1
3	124	1309	NPR	34R	SE	19.3	-1
4	111	1314	NPR	10B	SW	7.0	-1
5	103	1326	NPR	6G	NE	21.9	-1
6	118	1350	NPR	31S	NE	26.0	-1
7	122	1403	NPR	33S	SW	.	-1
8	116	1419	NPR	34R	NE	25.3	-1
9	100	1423	NPR	8G	SE	16.2	-1
10	108	1731	NPR	27S	SW	21.5	-1
11	109	1733	NPR	27S	SW	21.5	-1
12	119	1736	NPR	29S	SW	21.4	-1
13	120	1745	NPR	12G	SW	13.7	-1
14	110	1776	NPR	10B	SE	5.7	-1
15	123	1784	NPR	32R	NE	14.1	-1
16	117	1833	NPR	3B	NW	3.4	-1
17	104	1835	NPR	5G	NW	22.4	-1
18	112	1839	NPR	32R	SE	6.2	-1
19	105	2022	NPR	18G	NW	19.8	-1
20	102	2063	NPR	17G	NE	17.6	-1
21	101	2065	NPR	17G	NE	17.6	-1
22	150	3212	CampR	3A	SW	.	-1
23	144	3393	CampR	2A	NE	.	-1
24	151	3399	CampR	10A	SE	.	-1
25	153	3806	CampR	8A	NW	.	-1
26	154	3817	CampR	8A	NW	.	-1
27	141	3819	CampR	17A	NE	.	-1
28	152	3859	CampR	9A	SE	.	-1
29	143	3868	CampR	14A	NW	.	-1
30	140	3883	CampR	16A	NW	.	-1
31	142	3893	CampR	17A	SE	.	-1
32	107	3989	NPR	25S	SE	24.0	-1
33	113	4025	NPR	32R	SW	3.3	-1
34	114	4313	NPR	8R	NE	12.3	-1
35	121	4355	NPR	17S	NW	1.0	-1
36	115	4380#1	NPR	12B	SE	10.3	-1
37	106	4654	NPR	25S	NE	17.9	-1

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	LA
1	144	3393	CampR	2A	NE	.	25.8
2	151	3399	CampR	10A	SE	.	25.8
3	126	****	NPR	12B	SE	.	25.5
4	116	1419	NPR	34R	NE	25.3	25.5
5	124	1309	NPR	34R	SE	19.3	25.0
6	108	1731	NPR	27S	SW	21.5	25.0
7	113	4025	NPR	32R	SW	3.3	25.0
8	115	4380#1	NPR	12B	SE	10.3	24.9
9	118	1350	NPR	31S	NE	26.0	24.6
10	122	1403	NPR	33S	SW	.	24.6
11	107	3989	NPR	25S	SE	24.0	24.3
12	101	2065	NPR	17G	NE	17.6	24.2
13	102	2063	NPR	17G	NE	17.6	24.1
14	106	4654	NPR	25S	NE	17.9	24.0
15	120	1745	NPR	12G	SW	13.7	23.9
16	100	1423	NPR	8G	SE	16.2	23.8
17	121	4355	NPR	17S	NW	1.0	23.8
18	119	1736	NPR	29S	SW	21.4	23.4
19	142	3893	CampR	17A	SE	.	23.4
20	114	4313	NPR	8R	NE	12.3	23.3
21	123	1784	NPR	32R	NE	14.1	23.2
22	112	1839	NPR	32R	SE	6.2	22.8
23	104	1835	NPR	5G	NW	22.4	22.6
24	109	1733	NPR	27S	SW	21.5	22.4
25	150	3212	CampR	3A	SW	.	22.4
26	140	3883	CampR	16A	NW	.	22.4
27	153	3806	CampR	8A	NW	.	22.2
28	154	3817	CampR	8A	NW	.	22.0
29	117	1833	NPR	3B	NW	3.4	21.6
30	152	3859	CampR	9A	SE	.	21.6
31	125	****	NPR	8R	NE	.	21.1
32	141	3819	CampR	17A	NE	.	20.9
33	103	1326	NPR	6G	NE	21.9	20.7
34	111	1314	NPR	10B	SW	7.0	20.6
35	105	2022	NPR	18G	NW	19.8	20.4
36	143	3868	CampR	14A	NW	.	20.2
37	110	1776	NPR	10B	SE	5.7	19.7

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	LU
1	126	****	NPR	12B	SE	.	0.32
2	151	3399	CampR	10A	SE	.	0.30
3	141	3819	CampR	17A	NE	.	0.30
4	142	3893	CampR	17A	SE	.	0.30
5	124	1309	NPR	34R	SE	19.3	0.29
6	102	2063	NPR	17G	NE	17.6	0.29
7	150	3212	CampR	3A	SW	.	0.29
8	144	3393	CampR	2A	NE	.	0.29
9	116	1419	NPR	34R	NE	25.3	0.28
10	108	1731	NPR	27S	SW	21.5	0.28
11	112	1839	NPR	32R	SE	6.2	0.28
12	140	3883	CampR	16A	NW	.	0.28
13	107	3989	NPR	25S	SE	24.0	0.28
14	113	4025	NPR	32R	SW	3.3	0.28
15	114	4313	NPR	8R	NE	12.3	0.28
16	115	4380#1	NPR	12B	SE	10.3	0.28
17	125	****	NPR	8R	NE	.	0.27
18	118	1350	NPR	31S	NE	26.0	0.27
19	101	2065	NPR	17G	NE	17.6	0.27
20	153	3806	CampR	8A	NW	.	0.27
21	154	3817	CampR	8A	NW	.	0.27
22	106	4654	NPR	25S	NE	17.9	0.27
23	111	1314	NPR	10B	SW	7.0	0.26
24	122	1403	NPR	33S	SW	.	0.26
25	109	1733	NPR	27S	SW	21.5	0.26
26	120	1745	NPR	12G	SW	13.7	0.26
27	100	1423	NPR	8G	SE	16.2	0.25
28	119	1736	NPR	29S	SW	21.4	0.25
29	123	1784	NPR	32R	NE	14.1	0.25
30	117	1833	NPR	3B	NW	3.4	0.25
31	104	1835	NPR	5G	NW	22.4	0.25
32	143	3868	CampR	14A	NW	.	0.25
33	121	4355	NPR	17S	NW	1.0	0.25
34	103	1326	NPR	6G	NE	21.9	0.24
35	105	2022	NPR	18G	NW	19.8	0.24
36	152	3859	CampR	9A	SE	.	0.24
37	110	1776	NPR	10B	SE	5.7	0.22

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	MO
1	111	1314	NPR	10B	SW	7.0	4
2	126	****	NPR	12B	SE	.	3
3	124	1309	NPR	34R	SE	19.3	3
4	118	1350	NPR	31S	NE	26.0	3
5	116	1419	NPR	34R	NE	25.3	3
6	120	1745	NPR	12G	SW	13.7	3
7	123	1784	NPR	32R	NE	14.1	3
8	104	1835	NPR	5G	NW	22.4	3
9	112	1839	NPR	32R	SE	6.2	3
10	113	4025	NPR	32R	SW	3.3	3
11	114	4313	NPR	8R	NE	12.3	3
12	115	4380#1	NPR	12B	SE	10.3	3
13	103	1326	NPR	6G	NE	21.9	2
14	122	1403	NPR	33S	SW	.	2
15	109	1733	NPR	27S	SW	21.5	2
16	119	1736	NPR	29S	SW	21.4	2
17	117	1833	NPR	3B	NW	3.4	2
18	105	2022	NPR	18G	NW	19.8	2
19	102	2063	NPR	17G	NE	17.6	2
20	125	****	NPR	8R	NE	.	-2
21	100	1423	NPR	8G	SE	16.2	-2
22	108	1731	NPR	27S	SW	21.5	-2
23	110	1776	NPR	10B	SE	5.7	-2
24	101	2065	NPR	17G	NE	17.6	-2
25	150	3212	CampR	3A	SW	.	-2
26	144	3393	CampR	2A	NE	.	-2
27	151	3399	CampR	10A	SE	.	-2
28	153	3806	CampR	8A	NW	.	-2
29	154	3817	CampR	8A	NW	.	-2
30	141	3819	CampR	17A	NE	.	-2
31	152	3859	CampR	9A	SE	.	-2
32	143	3868	CampR	14A	NW	.	-2
33	140	3883	CampR	16A	NW	.	-2
34	142	3893	CampR	17A	SE	.	-2
35	107	3989	NPR	25S	SE	24.0	-2
36	121	4355	NPR	17S	NW	1.0	-2
37	106	4654	NPR	25S	NE	17.9	-2

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	ND
1	115	4380#1	NPR	12B	SE	10.3	23
2	126	****	NPR	12B	SE	.	22
3	118	1350	NPR	31S	NE	26.0	22
4	116	1419	NPR	34R	NE	25.3	22
5	120	1745	NPR	12G	SW	13.7	22
6	113	4025	NPR	32R	SW	3.3	22
7	124	1309	NPR	34R	SE	19.3	21
8	122	1403	NPR	33S	SW	.	21
9	108	1731	NPR	27S	SW	21.5	21
10	119	1736	NPR	29S	SW	21.4	21
11	102	2063	NPR	17G	NE	17.6	21
12	144	3393	CampR	2A	NE	.	21
13	151	3399	CampR	10A	SE	.	21
14	107	3989	NPR	25S	SE	24.0	21
15	114	4313	NPR	8R	NE	12.3	21
16	121	4355	NPR	17S	NW	1.0	21
17	106	4654	NPR	25S	NE	17.9	21
18	100	1423	NPR	8G	SE	16.2	20
19	101	2065	NPR	17G	NE	17.6	20
20	109	1733	NPR	27S	SW	21.5	19
21	123	1784	NPR	32R	NE	14.1	19
22	112	1839	NPR	32R	SE	6.2	19
23	150	3212	CampR	3A	SW	.	19
24	153	3806	CampR	8A	NW	.	19
25	140	3883	CampR	16A	NW	.	19
26	142	3893	CampR	17A	SE	.	19
27	111	1314	NPR	10B	SW	7.0	18
28	103	1326	NPR	6G	NE	21.9	18
29	117	1833	NPR	3B	NW	3.4	18
30	104	1835	NPR	5G	NW	22.4	18
31	154	3817	CampR	8A	NW	.	18
32	141	3819	CampR	17A	NE	.	18
33	152	3859	CampR	9A	SE	.	18
34	125	****	NPR	8R	NE	.	17
35	110	1776	NPR	10B	SE	5.7	17
36	105	2022	NPR	18G	NW	19.8	17
37	143	3868	CampR	14A	NW	.	17

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	NI
1	154	3817	CampR	8A	NW	.	80
2	153	3806	CampR	8A	NW	.	71
3	150	3212	CampR	3A	SW	.	64
4	140	3883	CampR	16A	NW	.	61
5	144	3393	CampR	2A	NE	.	58
6	151	3399	CampR	10A	SE	.	41
7	113	4025	NPR	32R	SW	3.3	38
8	111	1314	NPR	10B	SW	7.0	36
9	118	1350	NPR	31S	NE	26.0	36
10	112	1839	NPR	32R	SE	6.2	34
11	126	****	NPR	12B	SE	.	33
12	152	3859	CampR	9A	SE	.	33
13	115	4380#1	NPR	12B	SE	10.3	33
14	101	2065	NPR	17G	NE	17.6	32
15	143	3868	CampR	14A	NW	.	32
16	123	1784	NPR	32R	NE	14.1	31
17	116	1419	NPR	34R	NE	25.3	30
18	141	3819	CampR	17A	NE	.	30
19	124	1309	NPR	34R	SE	19.3	29
20	100	1423	NPR	8G	SE	16.2	29
21	102	2063	NPR	17G	NE	17.6	29
22	114	4313	NPR	8R	NE	12.3	29
23	109	1733	NPR	27S	SW	21.5	28
24	110	1776	NPR	10B	SE	5.7	28
25	117	1833	NPR	3B	NW	3.4	28
26	142	3893	CampR	17A	SE	.	28
27	125	****	NPR	8R	NE	.	27
28	103	1326	NPR	6G	NE	21.9	27
29	122	1403	NPR	33S	SW	.	27
30	119	1736	NPR	29S	SW	21.4	27
31	104	1835	NPR	5G	NW	22.4	27
32	108	1731	NPR	27S	SW	21.5	26
33	120	1745	NPR	12G	SW	13.7	26
34	105	2022	NPR	18G	NW	19.8	25
35	107	3989	NPR	25S	SE	24.0	25
36	121	4355	NPR	17S	NW	1.0	2
37	106	4654	NPR	25S	NE	17.9	21

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	PB
1	150	3212	CampR	3A	SW	.	34
2	152	3859	CampR	9A	SE	.	27
3	144	3393	CampR	2A	NE	.	21
4	140	3883	CampR	16A	NW	.	20
5	142	3893	CampR	17A	SE	.	18
6	116	1419	NPR	34R	NE	25.3	16
7	153	3806	CampR	8A	NW	.	16
8	154	3817	CampR	8A	NW	.	16
9	151	3399	CampR	10A	SE	.	15
10	141	3819	CampR	17A	NE	.	15
11	118	1350	NPR	31S	NE	26.0	14
12	120	1745	NPR	12G	SW	13.7	14
13	113	4025	NPR	32R	SW	3.3	14
14	106	4654	NPR	25S	NE	17.9	14
15	123	1784	NPR	32R	NE	14.1	13
16	143	3868	CampR	14A	NW	.	13
17	126	****	NPR	12B	SE	.	12
18	122	1403	NPR	33S	SW	.	12
19	100	1423	NPR	8G	SE	16.2	11
20	117	1833	NPR	3B	NW	3.4	11
21	104	1835	NPR	5G	NW	22.4	11
22	112	1839	NPR	32R	SE	6.2	11
23	105	2022	NPR	18G	NW	19.8	11
24	102	2063	NPR	17G	NE	17.6	11
25	101	2065	NPR	17G	NE	17.6	11
26	107	3989	NPR	25S	SE	24.0	11
27	114	4313	NPR	8R	NE	12.3	11
28	115	4380#1	NPR	12B	SE	10.3	11
29	125	****	NPR	8R	NE	.	10
30	124	1309	NPR	34R	SE	19.3	10
31	103	1326	NPR	6G	NE	21.9	10
32	119	1736	NPR	29S	SW	21.4	10
33	111	1314	NPR	10B	SW	7.0	9
34	108	1731	NPR	27S	SW	21.5	9
35	109	1733	NPR	27S	SW	21.5	9
36	110	1776	NPR	10B	SE	5.7	9
37	121	4355	NPR	17S	NW	1.0	8

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	RB
1	122	1403	NPR	33S	SW	.	100
2	141	3819	CampR	17A	NE	.	100
3	100	1423	NPR	8G	SE	16.2	96
4	142	3893	CampR	17A	SE	.	96
5	126	****	NPR	12B	SE	.	94
6	110	1776	NPR	10B	SE	5.7	94
7	102	2063	NPR	17G	NE	17.6	94
8	109	1733	NPR	27S	SW	21.5	92
9	124	1309	NPR	34R	SE	19.3	91
10	119	1736	NPR	29S	SW	21.4	91
11	112	1839	NPR	32R	SE	6.2	91
12	153	3806	CampR	8A	NW	.	91
13	105	2022	NPR	18G	NW	19.8	90
14	118	1350	NPR	31S	NE	26.0	89
15	117	1833	NPR	3B	NW	3.4	89
16	121	4355	NPR	17S	NW	1.0	89
17	120	1745	NPR	12G	SW	13.7	88
18	152	3859	CampR	9A	SE	.	88
19	114	4313	NPR	8R	NE	12.3	88
20	108	1731	NPR	27S	SW	21.5	87
21	154	3817	CampR	8A	NW	.	87
22	116	1419	NPR	34R	NE	25.3	85
23	143	3868	CampR	14A	NW	.	85
24	103	1326	NPR	6G	NE	21.9	84
25	123	1784	NPR	32R	NE	14.1	84
26	104	1835	NPR	5G	NW	22.4	84
27	106	4654	NPR	25S	NE	17.9	84
28	151	3399	CampR	10A	SE	.	83
29	107	3989	NPR	25S	SE	24.0	83
30	111	1314	NPR	10B	SW	7.0	82
31	115	4380#1	NPR	12B	SE	10.3	82
32	101	2065	NPR	17G	NE	17.6	81
33	113	4025	NPR	32R	SW	3.3	81
34	125	****	NPR	8R	NE	.	80
35	150	3212	CampR	3A	SW	.	80
36	144	3393	CampR	2A	NE	.	79
37	140	3883	CampR	16A	NW	.	79

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	SB
1	111	1314	NPR	10B	SW	7.0	1.0
2	114	4313	NPR	8R	NE	12.3	1.0
3	125	****	NPR	8R	NE	.	0.9
4	126	****	NPR	12B	SE	.	0.9
5	118	1350	NPR	31S	NE	26.0	0.9
6	112	1839	NPR	32R	SE	6.2	0.9
7	152	3859	CampR	9A	SE	.	0.9
8	140	3883	CampR	16A	NW	.	0.9
9	113	4025	NPR	32R	SW	3.3	0.9
10	115	4380#1	NPR	12B	SE	10.3	0.9
11	124	1309	NPR	34R	SE	19.3	0.8
12	116	1419	NPR	34R	NE	25.3	0.8
13	109	1733	NPR	27S	SW	21.5	0.8
14	110	1776	NPR	10B	SE	5.7	0.8
15	123	1784	NPR	32R	NE	14.1	0.8
16	105	2022	NPR	18G	NW	19.8	0.8
17	150	3212	CampR	3A	SW	.	0.8
18	144	3393	CampR	2A	NE	.	0.8
19	143	3868	CampR	14A	NW	.	0.8
20	142	3893	CampR	17A	SE	.	0.8
21	107	3989	NPR	25S	SE	24.0	0.8
22	106	4654	NPR	25S	NE	17.9	0.8
23	103	1326	NPR	6G	NE	21.9	0.7
24	122	1403	NPR	33S	SW	.	0.7
25	100	1423	NPR	8G	SE	16.2	0.7
26	108	1731	NPR	27S	SW	21.5	0.7
27	119	1736	NPR	29S	SW	21.4	0.7
28	120	1745	NPR	12G	SW	13.7	0.7
29	117	1833	NPR	3B	NW	3.4	0.7
30	104	1835	NPR	5G	NW	22.4	0.7
31	102	2063	NPR	17G	NE	17.6	0.7
32	101	2065	NPR	17G	NE	17.6	0.7
33	151	3399	CampR	10A	SE	.	0.7
34	153	3806	CampR	8A	NW	.	0.7
35	141	3819	CampR	17A	NE	.	0.7
36	121	4355	NPR	17S	NW	1.0	0.7
37	154	3817	CampR	8A	NW	.	0.6

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	SC
1	140	3883	CampR	16A	NW	.	7.6
2	113	4025	NPR	32R	SW	3.3	7.2
3	114	4313	NPR	8R	NE	12.3	7.2
4	126	****	NPR	12B	SE	.	7.1
5	118	1350	NPR	31S	NE	26.0	6.8
6	116	1419	NPR	34R	NE	25.3	6.8
7	144	3393	CampR	2A	NE	.	6.7
8	153	3806	CampR	8A	NW	.	6.7
9	125	****	NPR	8R	NE	.	6.6
10	150	3212	CampR	3A	SW	.	6.6
11	154	3817	CampR	8A	NW	.	6.5
12	115	4380#1	NPR	12B	SE	10.3	6.5
13	112	1839	NPR	32R	SE	6.2	6.3
14	124	1309	NPR	34R	SE	19.3	6.1
15	108	1731	NPR	27S	SW	21.5	6.1
16	151	3399	CampR	10A	SE	.	6.0
17	107	3989	NPR	25S	SE	24.0	6.0
18	122	1403	NPR	33S	SW	.	5.9
19	123	1784	NPR	32R	NE	14.1	5.9
20	101	2065	NPR	17G	NE	17.6	5.9
21	102	2063	NPR	17G	NE	17.6	5.8
22	109	1733	NPR	27S	SW	21.5	5.4
23	117	1833	NPR	3B	NW	3.4	5.4
24	106	4654	NPR	25S	NE	17.9	5.4
25	111	1314	NPR	10B	SW	7.0	5.3
26	100	1423	NPR	8G	SE	16.2	5.3
27	121	4355	NPR	17S	NW	1.0	5.3
28	103	1326	NPR	6G	NE	21.9	5.1
29	120	1745	NPR	12G	SW	13.7	5.1
30	119	1736	NPR	29S	SW	21.4	5.0
31	104	1835	NPR	5G	NW	22.4	5.0
32	105	2022	NPR	18G	NW	19.8	5.0
33	152	3859	CampR	9A	SE	.	4.9
34	110	1776	NPR	10B	SE	5.7	4.8
35	143	3868	CampR	14A	NW	.	4.4
36	142	3893	CampR	17A	SE	.	4.3
37	141	3819	CampR	17A	NE	.	4.1

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	SE
1	115	4380#1	NPR	12B	SE	10.3	1.0
2	119	1736	NPR	29S	SW	21.4	0.5
3	104	1835	NPR	5G	NW	22.4	0.5
4	125	****	NPR	8R	NE	.	-0.5
5	126	****	NPR	12B	SE	.	-0.5
6	124	1309	NPR	34R	SE	19.3	-0.5
7	111	1314	NPR	10B	SW	7.0	-0.5
8	103	1326	NPR	6G	NE	21.9	-0.5
9	118	1350	NPR	31S	NE	26.0	-0.5
10	122	1403	NPR	33S	SW	.	-0.5
11	116	1419	NPR	34R	NE	25.3	-0.5
12	100	1423	NPR	8G	SE	16.2	-0.5
13	108	1731	NPR	27S	SW	21.5	-0.5
14	109	1733	NPR	27S	SW	21.5	-0.5
15	120	1745	NPR	12G	SW	13.7	-0.5
16	110	1776	NPR	10B	SE	5.7	-0.5
17	123	1784	NPR	32R	NE	14.1	-0.5
18	117	1833	NPR	3B	NW	3.4	-0.5
19	112	1839	NPR	32R	SE	6.2	-0.5
20	105	2022	NPR	18G	NW	19.8	-0.5
21	102	2063	NPR	17G	NE	17.6	-0.5
22	101	2065	NPR	17G	NE	17.6	-0.5
23	150	3212	CampR	3A	SW	.	-0.5
24	144	3393	CampR	2A	NE	.	-0.5
25	151	3399	CampR	10A	SE	.	-0.5
26	153	3806	CampR	8A	NW	.	-0.5
27	154	3817	CampR	8A	NW	.	-0.5
28	141	3819	CampR	17A	NE	.	-0.5
29	152	3859	CampR	9A	SE	.	-0.5
30	143	3868	CampR	14A	NW	.	-0.5
31	140	3883	CampR	16A	NW	.	-0.5
32	142	3893	CampR	17A	SE	.	-0.5
33	107	3989	NPR	25S	SE	24.0	-0.5
34	113	4025	NPR	32R	SW	3.3	-0.5
35	114	4313	NPR	8R	NE	12.3	-0.5
36	121	4355	NPR	17S	NW	1.0	-0.5
37	106	4654	NPR	25S	NE	17.9	-0.5

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	SM
1	126	****	NPR	12B	SE	.	4.1
2	116	1419	NPR	34R	NE	25.3	4.1
3	144	3393	CampR	2A	NE	.	4.1
4	151	3399	CampR	10A	SE	.	4.0
5	113	4025	NPR	32R	SW	3.3	4.0
6	124	1309	NPR	34R	SE	19.3	3.9
7	118	1350	NPR	31S	NE	26.0	3.9
8	108	1731	NPR	27S	SW	21.5	3.9
9	120	1745	NPR	12G	SW	13.7	3.9
10	114	4313	NPR	8R	NE	12.3	3.9
11	115	4380#1	NPR	12B	SE	10.3	3.9
12	122	1403	NPR	33S	SW	.	3.8
13	119	1736	NPR	29S	SW	21.4	3.8
14	102	2063	NPR	17G	NE	17.6	3.8
15	101	2065	NPR	17G	NE	17.6	3.8
16	140	3883	CampR	16A	NW	.	3.8
17	107	3989	NPR	25S	SE	24.0	3.8
18	106	4654	NPR	25S	NE	17.9	3.8
19	150	3212	CampR	3A	SW	.	3.7
20	121	4355	NPR	17S	NW	1.0	3.7
21	125	****	NPR	8R	NE	.	3.6
22	100	1423	NPR	8G	SE	16.2	3.6
23	123	1784	NPR	32R	NE	14.1	3.6
24	104	1835	NPR	5G	NW	22.4	3.6
25	112	1839	NPR	32R	SE	6.2	3.6
26	153	3806	CampR	8A	NW	.	3.6
27	142	3893	CampR	17A	SE	.	3.6
28	109	1733	NPR	27S	SW	21.5	3.5
29	154	3817	CampR	8A	NW	.	3.5
30	152	3859	CampR	9A	SE	.	3.4
31	117	1833	NPR	3B	NW	3.4	3.3
32	141	3819	CampR	17A	NE	.	3.3
33	111	1314	NPR	10B	SW	7.0	3.2
34	103	1326	NPR	6G	NE	21.9	3.2
35	105	2022	NPR	18G	NW	19.8	3.2
36	143	3868	CampR	14A	NW	.	3.2
37	110	1776	NPR	10B	SE	5.7	3.1

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	SR
1	116	1419	NPR	34R	NE	25.3	350
2	118	1350	NPR	31S	NE	26.0	330
3	119	1736	NPR	29S	SW	21.4	322
4	120	1745	NPR	12G	SW	13.7	321
5	104	1835	NPR	5G	NW	22.4	321
6	125	****	NPR	8R	NE	.	317
7	114	4313	NPR	8R	NE	12.3	311
8	107	3989	NPR	25S	SE	24.0	310
9	108	1731	NPR	27S	SW	21.5	308
10	101	2065	NPR	17G	NE	17.6	307
11	106	4654	NPR	25S	NE	17.9	306
12	122	1403	NPR	33S	SW	.	305
13	105	2022	NPR	18G	NW	19.8	304
14	109	1733	NPR	27S	SW	21.5	302
15	103	1326	NPR	6G	NE	21.9	300
16	100	1423	NPR	8G	SE	16.2	300
17	121	4355	NPR	17S	NW	1.0	300
18	124	1309	NPR	34R	SE	19.3	298
19	117	1833	NPR	3B	NW	3.4	298
20	113	4025	NPR	32R	SW	3.3	293
21	102	2063	NPR	17G	NE	17.6	291
22	126	****	NPR	12B	SE	.	288
23	111	1314	NPR	10B	SW	7.0	285
24	123	1784	NPR	32R	NE	14.1	285
25	112	1839	NPR	32R	SE	6.2	285
26	115	4380#1	NPR	12B	SE	10.3	283
27	110	1776	NPR	10B	SE	5.7	281
28	152	3859	CampR	9A	SE	.	218
29	151	3399	CampR	10A	SE	.	212
30	144	3393	CampR	2A	NE	.	205
31	150	3212	CampR	3A	SW	.	202
32	154	3817	CampR	8A	NW	.	202
33	141	3819	CampR	17A	NE	.	202
34	142	3893	CampR	17A	SE	.	202
35	153	3806	CampR	8A	NW	.	194
36	143	3868	CampR	14A	NW	.	192
37	140	3883	CampR	16A	NW	.	192

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	TA
1	102	2063	NPR	17G	NE	17.6	1.0
2	151	3399	CampR	10A	SE	.	0.9
3	106	4654	NPR	25S	NE	17.9	0.9
4	125	****	NPR	8R	NE	.	0.8
5	124	1309	NPR	34R	SE	19.3	0.8
6	122	1403	NPR	33S	SW	.	0.8
7	116	1419	NPR	34R	NE	25.3	0.8
8	109	1733	NPR	27S	SW	21.5	0.8
9	112	1839	NPR	32R	SE	6.2	0.8
10	144	3393	CampR	2A	NE	.	0.8
11	153	3806	CampR	8A	NW	.	0.8
12	107	3989	NPR	25S	SE	24.0	0.8
13	113	4025	NPR	32R	SW	3.3	0.8
14	126	****	NPR	12B	SE	.	0.7
15	111	1314	NPR	10B	SW	7.0	0.7
16	100	1423	NPR	8G	SE	16.2	0.7
17	119	1736	NPR	29S	SW	21.4	0.7
18	104	1835	NPR	5G	NW	22.4	0.7
19	101	2065	NPR	17G	NE	17.6	0.7
20	150	3212	CampR	3A	SW	.	0.7
21	154	3817	CampR	8A	NW	.	0.7
22	142	3893	CampR	17A	SE	.	0.7
23	114	4313	NPR	8R	NE	12.3	0.7
24	115	4380#1	NPR	12B	SE	10.3	0.7
25	103	1326	NPR	6G	NE	21.9	0.6
26	118	1350	NPR	31S	NE	26.0	0.6
27	108	1731	NPR	27S	SW	21.5	0.6
28	120	1745	NPR	12G	SW	13.7	0.6
29	110	1776	NPR	10B	SE	5.7	0.6
30	123	1784	NPR	32R	NE	14.1	0.6
31	117	1833	NPR	3B	NW	3.4	0.6
32	141	3819	CampR	17A	NE	.	0.6
33	152	3859	CampR	9A	SE	.	0.6
34	140	3883	CampR	16A	NW	.	0.6
35	121	4355	NPR	17S	NW	1.0	0.6
36	105	2022	NPR	18G	NW	19.8	0.5
37	143	3868	CampR	14A	NW	.	0.5

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	TB
1	126	****	NPR	12B	SE	.	0.6
2	124	1309	NPR	34R	SE	19.3	0.6
3	116	1419	NPR	34R	NE	25.3	0.6
4	108	1731	NPR	27S	SW	21.5	0.6
5	120	1745	NPR	12G	SW	13.7	0.6
6	101	2065	NPR	17G	NE	17.6	0.6
7	150	3212	CampR	3A	SW	.	0.6
8	144	3393	CampR	2A	NE	.	0.6
9	151	3399	CampR	10A	SE	.	0.6
10	142	3893	CampR	17A	SE	.	0.6
11	113	4025	NPR	32R	SW	3.3	0.6
12	114	4313	NPR	8R	NE	12.3	0.6
13	121	4355	NPR	17S	NW	1.0	0.6
14	125	****	NPR	8R	NE	.	0.5
15	111	1314	NPR	10B	SW	7.0	0.5
16	103	1326	NPR	6G	NE	21.9	0.5
17	118	1350	NPR	31S	NE	26.0	0.5
18	122	1403	NPR	33S	SW	.	0.5
19	100	1423	NPR	8G	SE	16.2	0.5
20	109	1733	NPR	27S	SW	21.5	0.5
21	119	1736	NPR	29S	SW	21.4	0.5
22	110	1776	NPR	10B	SE	5.7	0.5
23	123	1784	NPR	32R	NE	14.1	0.5
24	117	1833	NPR	3B	NW	3.4	0.5
25	104	1835	NPR	5G	NW	22.4	0.5
26	112	1839	NPR	32R	SE	6.2	0.5
27	102	2063	NPR	17G	NE	17.6	0.5
28	153	3806	CampR	8A	NW	.	0.5
29	154	3817	CampR	8A	NW	.	0.5
30	141	3819	CampR	17A	NE	.	0.5
31	143	3868	CampR	14A	NW	.	0.5
32	140	3883	CampR	16A	NW	.	0.5
33	107	3989	NPR	25S	SE	24.0	0.5
34	115	4380#1	NPR	12B	SE	10.3	0.5
35	106	4654	NPR	25S	NE	17.9	0.5
36	105	2022	NPR	18G	NW	19.8	0.4
37	152	3859	CampR	9A	SE	.	0.4

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	TH
1	113	4025	NPR	32R	SW	3.3	10.0
2	126	****	NPR	12B	SE	.	9.2
3	144	3393	CampR	2A	NE	.	9.1
4	115	4380#1	NPR	12B	SE	10.3	9.1
5	151	3399	CampR	10A	SE	.	9.0
6	116	1419	NPR	34R	NE	25.3	8.9
7	118	1350	NPR	31S	NE	26.0	8.8
8	125	****	NPR	8R	NE	.	8.6
9	124	1309	NPR	34R	SE	19.3	8.6
10	102	2063	NPR	17G	NE	17.6	8.6
11	122	1403	NPR	33S	SW	.	8.5
12	100	1423	NPR	8G	SE	16.2	8.4
13	108	1731	NPR	27S	SW	21.5	8.4
14	107	3989	NPR	25S	SE	24.0	8.4
15	114	4313	NPR	8R	NE	12.3	8.3
16	101	2065	NPR	17G	NE	17.6	8.2
17	121	4355	NPR	17S	NW	1.0	8.2
18	112	1839	NPR	32R	SE	6.2	8.1
19	154	3817	CampR	8A	NW	.	8.1
20	106	4654	NPR	25S	NE	17.9	8.1
21	120	1745	NPR	12G	SW	13.7	8.0
22	123	1784	NPR	32R	NE	14.1	8.0
23	153	3806	CampR	8A	NW	.	8.0
24	142	3893	CampR	17A	SE	.	8.0
25	119	1736	NPR	29S	SW	21.4	7.9
26	109	1733	NPR	27S	SW	21.5	7.8
27	104	1835	NPR	5G	NW	22.4	7.8
28	140	3883	CampR	16A	NW	.	7.8
29	150	3212	CampR	3A	SW	.	7.7
30	111	1314	NPR	10B	SW	7.0	7.5
31	117	1833	NPR	3B	NW	3.4	7.5
32	141	3819	CampR	17A	NE	.	7.3
33	152	3859	CampR	9A	SE	.	7.1
34	103	1326	NPR	6G	NE	21.9	7.0
35	105	2022	NPR	18G	NW	19.8	7.0
36	143	3868	CampR	14A	NW	.	6.8
37	110	1776	NPR	10B	SE	5.7	6.4

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	U
1	123	1784	NPR	32R	NE	14.1	4.6
2	116	1419	NPR	34R	NE	25.3	4.4
3	113	4025	NPR	32R	SW	3.3	4.2
4	125	****	NPR	8R	NE	.	3.6
5	122	1403	NPR	33S	SW	.	3.4
6	114	4313	NPR	8R	NE	12.3	3.4
7	126	****	NPR	12B	SE	.	3.1
8	124	1309	NPR	34R	SE	19.3	3.1
9	111	1314	NPR	10B	SW	7.0	3.1
10	101	2065	NPR	17G	NE	17.6	3.1
11	153	3806	CampR	8A	NW	.	3.1
12	141	3819	CampR	17A	NE	.	3.1
13	142	3893	CampR	17A	SE	.	3.1
14	107	3989	NPR	25S	SE	24.0	3.1
15	105	2022	NPR	18G	NW	19.8	3.0
16	121	4355	NPR	17S	NW	1.0	3.0
17	106	4654	NPR	25S	NE	17.9	3.0
18	103	1326	NPR	6G	NE	21.9	2.9
19	100	1423	NPR	8G	SE	16.2	2.9
20	108	1731	NPR	27S	SW	21.5	2.9
21	154	3817	CampR	8A	NW	.	2.9
22	104	1835	NPR	5G	NW	22.4	2.8
23	102	2063	NPR	17G	NE	17.6	2.8
24	150	3212	CampR	3A	SW	.	2.8
25	115	4380#1	NPR	12B	SE	10.3	2.8
26	118	1350	NPR	31S	NE	26.0	2.7
27	117	1833	NPR	3B	NW	3.4	2.7
28	151	3399	CampR	10A	SE	.	2.7
29	120	1745	NPR	12G	SW	13.7	2.6
30	112	1839	NPR	32R	SE	6.2	2.6
31	144	3393	CampR	2A	NE	.	2.6
32	152	3859	CampR	9A	SE	.	2.6
33	109	1733	NPR	27S	SW	21.5	2.5
34	119	1736	NPR	29S	SW	21.4	2.5
35	140	3883	CampR	16A	NW	.	2.5
36	110	1776	NPR	10B	SE	5.7	2.2
37	143	3868	CampR	14A	NW	.	2.2

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	V
1	125	****	NPR	8R	NE	.	88
2	140	3883	CampR	16A	NW	.	78
3	113	4025	NPR	32R	SW	3.3	78
4	144	3393	CampR	2A	NE	.	74
5	107	3989	NPR	25S	SE	24.0	70
6	111	1314	NPR	10B	SW	7.0	66
7	118	1350	NPR	31S	NE	26.0	66
8	112	1839	NPR	32R	SE	6.2	66
9	124	1309	NPR	34R	SE	19.3	64
10	115	4380#1	NPR	12B	SE	10.3	64
11	116	1419	NPR	34R	NE	25.3	62
12	114	4313	NPR	8R	NE	12.3	60
13	126	****	NPR	12B	SE	.	58
14	103	1326	NPR	6G	NE	21.9	58
15	150	3212	CampR	3A	SW	.	58
16	123	1784	NPR	32R	NE	14.1	56
17	101	2065	NPR	17G	NE	17.6	56
18	151	3399	CampR	10A	SE	.	56
19	154	3817	CampR	8A	NW	.	56
20	119	1736	NPR	29S	SW	21.4	54
21	120	1745	NPR	12G	SW	13.7	54
22	102	2063	NPR	17G	NE	17.6	54
23	143	3868	CampR	14A	NW	.	54
24	122	1403	NPR	33S	SW	.	52
25	109	1733	NPR	27S	SW	21.5	52
26	117	1833	NPR	3B	NW	3.4	52
27	105	2022	NPR	18G	NW	19.8	52
28	121	4355	NPR	17S	NW	1.0	52
29	100	1423	NPR	8G	SE	16.2	50
30	108	1731	NPR	27S	SW	21.5	50
31	110	1776	NPR	10B	SE	5.7	48
32	153	3806	CampR	8A	NW	.	48
33	104	1835	NPR	5G	NW	22.4	46
34	106	4654	NPR	25S	NE	17.9	44
35	152	3859	CampR	9A	SE	.	40
36	142	3893	CampR	17A	SE	.	36
37	141	3819	CampR	17A	NE	.	34

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	W
1	114	4313	NPR	8R	NE	12.3	4
2	112	1839	NPR	32R	SE	6.2	3
3	142	3893	CampR	17A	SE	.	3
4	113	4025	NPR	32R	SW	3.3	3
5	100	1423	NPR	8G	SE	16.2	2
6	119	1736	NPR	29S	SW	21.4	2
7	151	3399	CampR	10A	SE	.	2
8	141	3819	CampR	17A	NE	.	2
9	144	3393	CampR	2A	NE	.	1
10	143	3868	CampR	14A	NW	.	1
11	125	****	NPR	8R	NE	.	-1
12	126	****	NPR	12B	SE	.	-1
13	124	1309	NPR	34R	SE	19.3	-1
14	111	1314	NPR	10B	SW	7.0	-1
15	103	1326	NPR	6G	NE	21.9	-1
16	118	1350	NPR	31S	NE	26.0	-1
17	122	1403	NPR	33S	SW	.	-1
18	116	1419	NPR	34R	NE	25.3	-1
19	108	1731	NPR	27S	SW	21.5	-1
20	109	1733	NPR	27S	SW	21.5	-1
21	120	1745	NPR	12G	SW	13.7	-1
22	110	1776	NPR	10B	SE	5.7	-1
23	123	1784	NPR	32R	NE	14.1	-1
24	117	1833	NPR	3B	NW	3.4	-1
25	104	1835	NPR	5G	NW	22.4	-1
26	105	2022	NPR	18G	NW	19.8	-1
27	102	2063	NPR	17G	NE	17.6	-1
28	101	2065	NPR	17G	NE	17.6	-1
29	150	3212	CampR	3A	SW	.	-1
30	153	3806	CampR	8A	NW	.	-1
31	154	3817	CampR	8A	NW	.	-1
32	152	3859	CampR	9A	SE	.	-1
33	140	3883	CampR	16A	NW	.	-1
34	107	3989	NPR	25S	SE	24.0	-1
35	121	4355	NPR	17S	NW	1.0	-1
36	115	4380#1	NPR	12B	SE	10.3	-1
37	106	4654	NPR	25S	NE	17.9	-1

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	Y
1	120	1745	NPR	12G	SW	13.7	22
2	150	3212	CampR	3A	SW	.	22
3	142	3893	CampR	17A	SE	.	22
4	126	****	NPR	12B	SE	.	20
5	109	1733	NPR	27S	SW	21.5	20
6	119	1736	NPR	29S	SW	21.4	20
7	110	1776	NPR	10B	SE	5.7	20
8	144	3393	CampR	2A	NE	.	20
9	151	3399	CampR	10A	SE	.	20
10	153	3806	CampR	8A	NW	.	20
11	140	3883	CampR	16A	NW	.	20
12	107	3989	NPR	25S	SE	24.0	20
13	113	4025	NPR	32R	SW	3.3	20
14	114	4313	NPR	8R	NE	12.3	20
15	115	4380#1	NPR	12B	SE	10.3	20
16	125	****	NPR	8R	NE	.	18
17	122	1403	NPR	33S	SW	.	18
18	108	1731	NPR	27S	SW	21.5	18
19	112	1839	NPR	32R	SE	6.2	18
20	101	2065	NPR	17G	NE	17.6	18
21	154	3817	CampR	8A	NW	.	18
22	141	3819	CampR	17A	NE	.	18
23	152	3859	CampR	9A	SE	.	18
24	143	3868	CampR	14A	NW	.	18
25	124	1309	NPR	34R	SE	19.3	16
26	111	1314	NPR	10B	SW	7.0	16
27	118	1350	NPR	31S	NE	26.0	16
28	116	1419	NPR	34R	NE	25.3	16
29	123	1784	NPR	32R	NE	14.1	16
30	104	1835	NPR	5G	NW	22.4	16
31	102	2063	NPR	17G	NE	17.6	16
32	121	4355	NPR	17S	NW	1.0	16
33	103	1326	NPR	6G	NE	21.9	14
34	100	1423	NPR	8G	SE	16.2	14
35	117	1833	NPR	3B	NW	3.4	14
36	105	2022	NPR	18G	NW	19.8	14
37	106	4654	NPR	25S	NE	17.9	14

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	YB
1	126	****	NPR	12B	SE	.	2.03
2	114	4313	NPR	8R	NE	12.3	1.86
3	151	3399	CampR	10A	SE	.	1.85
4	113	4025	NPR	32R	SW	3.3	1.85
5	102	2063	NPR	17G	NE	17.6	1.84
6	116	1419	NPR	34R	NE	25.3	1.82
7	142	3893	CampR	17A	SE	.	1.82
8	108	1731	NPR	27S	SW	21.5	1.81
9	141	3819	CampR	17A	NE	.	1.81
10	115	4380#1	NPR	12B	SE	10.3	1.80
11	107	3989	NPR	25S	SE	24.0	1.76
12	112	1839	NPR	32R	SE	6.2	1.75
13	144	3393	CampR	2A	NE	.	1.75
14	124	1309	NPR	34R	SE	19.3	1.74
15	150	3212	CampR	3A	SW	.	1.73
16	118	1350	NPR	31S	NE	26.0	1.72
17	125	****	NPR	8R	NE	.	1.70
18	153	3806	CampR	8A	NW	.	1.70
19	120	1745	NPR	12G	SW	13.7	1.69
20	101	2065	NPR	17G	NE	17.6	1.69
21	122	1403	NPR	33S	SW	.	1.68
22	106	4654	NPR	25S	NE	17.9	1.68
23	154	3817	CampR	8A	NW	.	1.64
24	140	3883	CampR	16A	NW	.	1.64
25	121	4355	NPR	17S	NW	1.0	1.64
26	109	1733	NPR	27S	SW	21.5	1.62
27	123	1784	NPR	32R	NE	14.1	1.58
28	111	1314	NPR	10B	SW	7.0	1.57
29	119	1736	NPR	29S	SW	21.4	1.56
30	100	1423	NPR	8G	SE	16.2	1.55
31	143	3868	CampR	14A	NW	.	1.54
32	152	3859	CampR	9A	SE	.	1.52
33	117	1833	NPR	3B	NW	3.4	1.51
34	110	1776	NPR	10	SE	5.7	1.50
35	105	2022	NPR	18G	NW	19.8	1.50
36	104	1835	NPR	5G	NW	22.4	1.45
37	103	1326	NPR	6G	NE	21.9	1.43

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	ZN
1	140	3883	CampR	16A	NW	.	70
2	111	1314	NPR	10B	SW	7.0	64
3	153	3806	CampR	8A	NW	.	61
4	118	1350	NPR	31S	NE	26.0	59
5	154	3817	CampR	8A	NW	.	59
6	142	3893	CampR	17A	SE	.	59
7	144	3393	CampR	2A	NE	.	58
8	113	4025	NPR	32R	SW	3.3	58
9	150	3212	CampR	3A	SW	.	56
10	126	****	NPR	12B	SE	.	53
11	116	1419	NPR	34R	NE	25.3	51
12	108	1731	NPR	27S	SW	21.5	51
13	120	1745	NPR	12G	SW	13.7	51
14	115	4380#1	NPR	12B	SE	10.3	51
15	112	1839	NPR	32R	SE	6.2	50
16	114	4313	NPR	8R	NE	12.3	50
17	109	1733	NPR	27S	SW	21.5	49
18	105	2022	NPR	18G	NW	19.8	49
19	101	2065	NPR	17G	NE	17.6	49
20	106	4654	NPR	25S	NE	17.9	49
21	123	1784	NPR	32R	NE	14.1	48
22	100	1423	NPR	8G	SE	16.2	47
23	102	2063	NPR	17G	NE	17.6	47
24	151	3399	CampR	10A	SE	.	47
25	107	3989	NPR	25S	SE	24.0	47
26	122	1403	NPR	33S	SW	.	46
27	125	****	NPR	8R	NE	.	45
28	119	1736	NPR	29S	SW	21.4	45
29	152	3859	CampR	9A	SE	.	45
30	124	1309	NPR	34R	SE	19.3	44
31	110	1776	NPR	10B	SE	5.7	44
32	117	1833	NPR	3B	NW	3.4	44
33	103	1326	NPR	6G	NE	21.9	43
34	141	3819	CampR	17A	NE	.	42
35	104	1835	NPR	5G	NW	22.4	41
36	143	3868	CampR	14A	NW	.	39
37	121	4355	NPR	17S	NW	1.0	29

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

OBS	SOIL_ID	FOX_ID	LOCATION	SECTION	QUARTER	AVGDIST	ZR
1	151	3399	CampR	10A	SE	.	272
2	141	3819	CampR	17A	NE	.	262
3	142	3893	CampR	17A	SE	.	257
4	144	3393	CampR	2A	NE	.	234
5	107	3989	NPR	25S	SE	24.0	230
6	150	3212	CampR	3A	SW	.	227
7	154	3817	CampR	8A	NW	.	224
8	126	****	NPR	12B	SE	.	214
9	101	2065	NPR	17G	NE	17.6	209
10	124	1309	NPR	34R	SE	19.3	205
11	113	4025	NPR	32R	SW	3.3	205
12	112	1839	NPR	32R	SE	6.2	202
13	143	3868	CampR	14A	NW	.	201
14	125	****	NPR	8R	NE	.	200
15	153	3806	CampR	8A	NW	.	198
16	116	1419	NPR	34R	NE	25.3	197
17	115	4380#1	NPR	12B	SE	10.3	196
18	102	2063	NPR	17G	NE	17.6	195
19	120	1745	NPR	12G	SW	13.7	192
20	106	4654	NPR	25S	NE	17.9	192
21	114	4313	NPR	8R	NE	12.3	185
22	121	4355	NPR	17S	NW	1.0	178
23	108	1731	NPR	27S	SW	21.5	174
24	105	2022	NPR	18G	NW	19.8	172
25	111	1314	NPR	10B	SW	7.0	168
26	152	3859	CampR	9A	SE	.	164
27	119	1736	NPR	29S	SW	21.4	162
28	103	1326	NPR	6G	NE	21.9	159
29	123	1784	NPR	32R	NE	14.1	155
30	104	1835	NPR	5G	NW	22.4	154
31	100	1423	NPR	8G	SE	16.2	152
32	110	1776	NPR	10B	SE	5.7	152
33	117	1833	NPR	3B	NW	3.4	148
34	122	1403	NPR	33S	SW	.	147
35	118	1350	NPR	31S	NE	26.0	146
36	109	1733	NPR	27S	SW	21.5	141
37	140	3883	CampR	16A	NW	.	135

SAMPLE 125 IS A DUPLICATE SUBSAMPLE OF #114
SAMPLE 126 IS A DUPLICATE SUBSAMPLE OF #115

APPENDIX C

Concentrations of elements in soil collected to represent soil types on NPR-1.

Table C1. Descriptions of the soil samples.

Sample[1]	MDY[2]	Location[3]	Section[4]	1\4-Section[5]	Undeveloped/ Developed[6]	Soil Type[7]
31	103091	NPR	1OB	SE	U	KCRW
32	103091	NPR	1OB	SE	U	KCRW
33	103091	NPR	10B	SE	U	KCRW
34	103091	NPR	1OB	SW	U	KCRW
35	103091	NPR	1OB	NE	U	KCRW
36	103091	NPR	1OB	NE	U	KCRW
37*	103091	NPR	1OB	NE	U	KCRW
38	103091	NPR	1OB	SE	D	KCRW
39*	103091	NPR	1OB	SE	D	KCRW
40	103091	NPR	14B	NW	D	KCRW
41	103091	NPR	14B	SE	D	KCRW
42	103091	NPR	14B	SE	D	KCRW
43	103091	NPR	13B	SW	D	KCRW
44	103091	NPR	13B	SE	D	KCRW
45	103191	NPR	25S	NE	D	KSL
46	103191	NPR	21S	NW	U	KSL
47	103191	NPR	17S	SW	U	KSL
49	110591	NPR	36R	SE	D	KSL
50	110591	NPR	18G	SE	D	KSL
51	110691	NPR	26Z	NE	D	EHSL
52	110691	NPR	24Z	NW	D	TVT
53	110691	NPR	24Z	NE	D	TT
54	110691	NPR	12Z	SE	U	EHSL
55	110691	NPR	19R	NE	U	TT
56	110691	NPR	20R	SE	U	TT
57	110791	NPR	14R	NE	U	EHSL
58	110791	NPR	19S	SW	U	TVT
59	110791	NPR	32S	NE	D	TT
60	110791	NPR	34S	SW	D	TVT

Table C1. Continued

Sample[1]	MDY[2]	Location[3]	Section[4]	1\4-Section[5]	Undeveloped/ Developed[6]	Soil Type[7]
61	110891	NPR	27S	SE	D	EHSL
62	110891	NPR	25S	SW	D	EHSL
70	111291	NPR	24Z	NW	D	TT
71	111291	NPR	14Z	NW	U	TT
72	111291	NPR	11B	NW	U	EHSL
73	111291	NPR	7G	NW	U	TVT
74*	111291	NPR	7G	NW	U	TVT
75	111291	NPR	5G	SE	D	TVT
76	111291	NPR	14R	SW	U	TVT
77	111391	NPR	12R	NW	U	KSL
78*	111391	NPR	12R	NW	U	KSL

[1]Sample = number of soil sample; * = this sample is a replicate: 37 is a replicate of 36, 39 is a replicate of 38, 74 is a replicate of 73, and 78 is a replicate of 77.
[2]MDY = month/day/year sample was collected.
[3]Location = where the sample was collected.
[4]Section = section where sample was collected.
[5]1/4-Section = quarter section where samples was collected; SE = south east, SW = south west, NE = north east, NW = north west.
[6]Undeveloped/Developed = whether samples was collected from a developed (D) or undeveloped (U) area.
[7]Soil Type: KCRW = Kimberlina Cajon Riverwash, KSL = Kimberlina Sandy Loam, EHSL = Elk Hills Sandy Loam, TT = Torriorthents Thick, TVT = Torriorthents Very Thin.

Table C2. Concentrations of elements in soil and 95% confidence bounds on the analytical error as percentages of the result.

Elements:	AU	+/-	AS	+/-	BR	+/-	CO	+/-	CR
Units:	PPB	%	PPM	%	PPM	%	PPM	%	PPM
Detection Limits:	2.000	1.000	2.000	20.000	0.500	0.200	0.100	0.500	0.200
31	-2.000	-1.000	3.000	11.000	-0.500	-1.000	2.600	6.000	31.000
32	-2.000	-1.000	3.000	7.000	-0.500	-1.000	2.800	6.000	35.000
33	-2.000	-1.000	2.000	10.000	-0.500	-1.000	2.400	6.000	33.000
34	-2.000	-1.000	3.000	9.000	-0.500	-1.000	3.000	6.000	39.000
35	-2.000	-1.000	3.000	10.000	-0.500	-1.000	2.400	6.000	28.000
36	-2.000	-1.000	3.000	9.000	-0.500	-1.000	2.900	5.000	34.000
37	-2.000	-1.000	3.000	11.000	-0.500	-1.000	2.800	6.000	25.000
38	-2.000	-1.000	4.000	8.000	-0.500	-1.000	2.200	7.000	29.000
39	-2.000	-1.000	4.000	8.000	0.700	20.000	2.100	7.000	23.000
40	-2.000	-1.000	4.000	8.000	1.000	17.000	2.600	6.000	35.000
41	-2.000	-1.000	4.000	8.000	1.000	16.000	2.700	6.000	41.000
42	-2.000	-1.000	4.000	8.000	0.800	18.000	2.500	6.000	29.000
43	-2.000	-1.000	3.000	9.000	0.500	26.000	2.000	7.000	27.000
44	-2.000	-1.000	4.000	8.000	0.900	17.000	2.800	5.000	35.000
45	-2.000	-1.000	3.000	9.000	-0.500	-1.000	2.800	5.000	31.000
46	2.000	57.000	7.000	7.000	1.100	16.000	7.300	3.000	51.000
47	-2.000	-1.000	8.000	7.000	1.100	18.000	7.400	3.000	60.000
49	-2.000	-1.000	10.000	6.000	2.200	11.000	8.900	3.000	73.000
50	-2.000	-1.000	4.000	10.000	-0.500	-1.000	4.800	4.000	42.000
51	-2.000	-1.000	7.000	7.000	2.000	11.000	8.500	3.000	76.000
52	2.000	75.000	12.000	6.000	1.800	14.000	11.000	3.000	86.000
53	-2.000	-1.000	7.000	8.000	1.800	13.000	8.700	3.000	70.000
54	-2.000	-1.000	6.000	9.000	1.200	18.000	10.000	2.000	77.000
55	-2.000	-1.000	8.000	7.000	1.900	13.000	9.200	3.000	73.000
56	-2.000	-1.000	7.000	7.000	1.400	14.000	7.200	3.000	45.000
57	-2.000	95.000	6.000	7.000	1.300	14.000	6.300	3.000	45.000
58	-2.000	-1.000	6.000	8.000	2.400	8.000	7.000	3.000	43.000
59	-2.000	-1.000	6.000	7.000	1.400	14.000	6.200	3.000	55.000
60	-2.000	-1.000	4.000	11.000	2.000	11.000	8.200	3.000	50.000
61	-2.000	-1.000	7.000	7.000	1.100	18.000	6.800	3.000	59.000
62	-2.000	-1.000	7.000	7.000	1.200	17.000	6.600	3.000	45.000
70	-2.000	-1.000	9.000	7.000	1.600	14.000	9.100	2.000	78.000
71	-2.000	-1.000	9.000	8.000	1.300	18.000	9.400	2.000	76.000
72	-2.000	-1.000	7.000	11.000	1.300	20.000	7.000	3.000	54.000
73	4.000	31.000	5.000	10.000	-0.500	-1.000	5.200	4.000	40.000
74	-2.000	-1.000	6.000	10.000	-0.500	-1.000	5.800	4.000	42.000
75	-2.000	-1.000	5.000	12.000	6.800	4.000	7.900	3.000	60.000
76	-2.000	-1.000	15.000	7.000	-0.500	-1.000	9.000	3.000	59.000
77	-2.000	-1.000	5.000	11.000	-0.500	-1.000	6.600	3.000	57.000
78	-2.000	-1.000	6.000	11.000	-0.500	-1.000	6.200	3.000	50.000
G2-2	-2.000	-1.000	-1.000	-1.000	-0.500	-1.000	4.800	6.000	13.000
G2-1	-2.000	-1.000	-1.000	-1.000	-0.500	-1.000	4.400	6.000	13.000
1632B-1	-2.000	-1.000	4.000	9.000	19.000	3.000	4.500	6.000	22.000

Table C2. Continued

Elements:	+/-	CS	+/-	HF	+/-	IR	+/-	MO	+/-
Units:	%	PPM	%	PPM	%	PPM	%	PPB	%
Detection Limits:	0.005	0.200	1.000	1.000	2.000	0.001	50.000	10.000	0.100
31	5.000	1.100	9.000	3.100	3.000	-1.000	-1.000	3.000	12.000
32	5.000	1.300	8.000	3.200	3.000	-1.000	-1.000	-2.000	14.000
33	5.000	1.200	9.000	3.300	3.000	-1.000	-1.000	2.000	15.000
34	5.000	1.400	7.000	3.300	3.000	-1.000	-1.000	2.000	13.000
35	5.000	1.200	8.000	2.700	3.000	-1.000	-1.000	-2.000	16.000
36	5.000	1.300	8.000	3.500	3.000	-1.000	-1.000	-2.000	. 000
37	6.000	1.300	8.000	2.900	3.000	-1.000	-1.000	-2.000	16.000
38	6.000	1.700	6.000	3.300	3.000	-1.000	-1.000	4.000	10.000
39	6.000	1.700	6.000	2.300	4.000	-1.000	-1.000	4.000	9.000
40	5.000	2.100	5.000	2.700	3.000	-1.000	-1.000	5.000	9.000
41	5.000	1.900	6.000	3.900	3.000	-1.000	-1.000	4.000	9.000
42	5.000	1.800	6.000	2.100	4.000	-1.000	-1.000	4.000	9.000
43	5.000	1.600	6.000	2.000	4.000	-1.000	-1.000	4.000	10.000
44	5.000	1.900	5.000	2.200	3.000	-1.000	-1.000	5.000	9.000
45	5.000	1.300	7.000	3.300	3.000	-1.000	-1.000	-2.000	19.000
46	5.000	2.400	5.000	4.800	3.000	-1.000	-1.000	-2.000	-1.000
47	5.000	2.600	5.000	5.000	3.000	-1.000	-1.000	3.000	14.000
49	5.000	3.000	5.000	4.500	3.000	-1.000	-1.000	3.000	11.000
50	5.000	1.800	6.000	5.100	3.000	-1.000	-1.000	3.000	12.000
51	5.000	3.100	5.000	5.100	3.000	-1.000	-1.000	-2.000	13.000
52	5.000	3.500	5.000	5.600	3.000	-1.000	-1.000	3.000	11.000
53	5.000	2.700	5.000	5.000	3.000	-1.000	-1.000	-2.000	14.000
54	5.000	3.200	4.000	6.600	2.000	-1.000	-1.000	2.00	11.000
55	5.000	3.100	5.000	5.800	3.000	-1.000	-1.000	-2.000	15.000
56	5.000	2.800	4.000	5.400	3.000	-1.000	-1.000	2.000	9.000
57	5.000	2.500	5.000	4.500	3.000	-1.000	-1.000	-2.000	-1.000
58	5.000	2.600	4.000	5.300	2.000	-1.000	-1.000	-2.000	-1.000
59	5.000	2.400	5.000	4.500	3.000	-1.000	-1.000	-2.000	-1.000
60	5.000	3.000	5.000	3.800	3.000	-1.000	-1.000	-2.000	-1.000
61	5.000	2.500	5.000	4.200	3.000	-1.000	-1.000	2.000	11.000
62	5.000	2.600	5.000	4.600	3.000	-1.000	-1.000	2.000	12.000
70	5.000	3.000	5.000	5.600	3.000	-1.000	-1.000	-2.000	-1.000
71	5.000	3.200	4.000	5.000	3.000	-1.000	-1.000	3.000	11.000
72	5.000	2.700	5.000	4.800	3.000	-1.000	-1.000	-2.000	14.000
73	5.000	2.100	6.000	4.300	3.000	-1.000	-1.000	3.000	11.000
74	5.000	2.200	6.000	5.000	3.000	-1.000	-1.000	3.000	11.000
75	5.000	3.000	5.000	3.600	3.000	-1.000	-1.000	-2.000	-1.000
76	5.000	3.100	5.000	5.100	3.000	-1.000	-1.000	-2.000	-1.000
77	5.000	2.400	5.000	4.500	3.000	-1.000	-1.000	-2.000	-1.000
78	5.000	2.200	5.000	4.700	3.000	-1.000	-1.000	-2.000	-1.000
G2-2	11.000	1.400	11.000	7.700	3.000	-1.000	-1.000	-2.000	-1.000
G2-1	11.000	1.400	11.000	8.100	3.000	-1.000	-1.000	-2.000	-1.000
1632B-1	11.000	0.700	40.000	0.600	20.000	-1.000	-1.000	-2.000	-1.000

Table C2. Continued

Elements:	RB	+/-	SB	+/-	SC	+/-	SE	+/-	TA
Units:	PPM	%	PPM	%	PPM	%	PPB	%	PPM
Detection Limits:	0.100	0.500	100.000	0.300	0.100	0.100	1.000	0.100	1.000
31	100.000	5.000	0.400	6.000	2.100	2.000	-0.500	-1.000	0.500
32	110.000	5.000	0.400	4.000	2.200	2.000	-0.500	-1.000	0.600
33	100.000	5.000	0.300	6.000	2.000	2.000	-0.500	-1.000	0.300
34	100.000	5.000	0.400	6.000	2.300	2.000	-0.500	-1.000	0.400
35	110.000	5.000	0.300	6.000	1.900	2.000	-0.500	-1.000	-0.300
36	100.000	5.000	0.400	6.000	2.400	2.000	-0.500	-1.000	0.500
37	100.000	5.000	0.400	6.000	2.100	2.000	-0.500	-1.000	-0.300
38	100.000	5.000	0.800	5.000	1.600	2.000	0.800	66.000	0.400
39	98.000	5.000	0.600	5.000	1.500	2.000	-0.500	-1.000	0.400
40	94.000	5.000	0.700	5.000	2.200	2.000	0.800	69.000	0.300
41	95.000	5.000	0.700	5.000	2.300	2.000	1.100	74.000	0.500
42	92.000	5.000	0.600	5.000	2.000	2.000	-0.500	-1.000	-0.300
43	100.000	5.000	0.500	5.000	1.500	2.000	0.600	71.000	0.400
44	97.000	5.000	0.700	5.000	2.300	2.000	0.600	-1.000	0.400
45	100.000	5.000	0.400	6.000	2.300	2.000	-0.500	-1.000	0.700
46	93.000	5.000	1.000	5.000	5.900	1.000	0.800	73.000	0.700
47	99.000	5.000	0.900	5.000	6.500	1.000	-0.500	-1.000	0.700
49	100.000	5.000	1.100	5.000	7.400	1.000	-0.500	-1.000	0.800
50	97.000	5.000	0.600	6.000	4.000	2.000	0.800	70.000	0.700
51	92.000	5.000	1.000	5.000	7.500	1.000	1.300	48.000	0.800
52	92.000	6.000	1.100	5.000	9.500	1.000	1.300	58.000	0.800
53	95.000	5.000	1.000	5.000	7.000	1.000	-0.500	-1.000	0.700
54	96.000	5.000	1.100	5.000	8.700	1.000	-0.500	-1.000	0.800
55	84.000	6.000	1.000	5.000	8.100	1.000	0.800	86.000	0.900
56	92.000	5.000	0.700	5.000	6.300	1.000	0.600	98.000	0.800
57	94.000	5.000	0.900	5.000	5.800	1.000	-0.500	-1.000	0.700
58	97.000	4.000	0.700	5.000	6.200	1.000	-0.500	-1.000	0.700
59	94.000	5.000	0.700	5.000	5.500	1.000	0.600	89.000	0.900
60	93.000	5.000	0.800	5.000	7.500	1.000	-0.500	-1.000	0.900
61	98.000	5.000	1.200	4.000	5.800	1.000	0.600	71.000	0.600
62	92.000	4.000	0.800	5.000	5.800	1.000	-0.500	-1.000	0.700
70	86.000	5.000	0.900	5.000	8.100	1.000	0.600	90.000	0.800
71	79.000	6.000	1.200	5.000	8.300	1.000	-0.500	-1.000	0.700
72	91.000	5.000	0.800	6.000	6.500	1.000	-0.500	-1.000	0.700
73	92.000	5.000	0.600	5.000	4.600	1.000	1.100	55.000	0.700
74	96.000	5.000	0.600	6.000	5.200	1.000	1.000	52.000	0.800
75	82.000	6.000	0.900	5.000	7.200	1.000	-0.500	-1.000	0.600
76	100.000	5.000	0.800	6.000	7.800	1.000	-0.500	-1.000	0.900
77	96.000	5.000	0.800	5.000	5.600	1.000	0.500	120.000	0.600
78	97.000	5.000	0.700	6.000	5.400	1.000	-0.500	-1.000	0.700
G2-2	170.000	5.000	0.200	8.000	3.300	2.000	-0.500	-1.000	0.800
G2-1	170.000	5.000	1.100	7.000	3.500	2.000	-0.500	-1.000	1.100
1632B-1	-10.000	-1.000	1.400	7.000	2.400	2.000	-0.500	-1.000	0.500

Table C2. Continued

Elements:	+/-	TH	+/-	U	+/-	W	+/-	LA	+/-
Units:	%	PPM	%	PPM	%	PPM	%	PPM	%
Detection Limits:	3.000	0.010	0.050	0.100	0.050	0.010	0.000	0.000	0.000
31	23.000	4.700	4.000	1.600	11.000	-1.000	-1.000	15.100	2.000
32	20.000	6.300	4.000	1.700	11.000	-1.000	-1.000	18.000	2.000
33	35.000	4.700	4.000	1.400	12.000	-1.000	-1.000	15.100	2.000
34	30.000	4.800	4.000	1.600	11.000	-1.000	-1.000	15.400	2.000
35	-1.000	4.400	4.000	1.500	12.000	-1.000	-1.000	15.100	2.000
36	24.000	5.300	4.000	1.900	10.000	2.000	36.000	16.000	2.000
37	-1.000	4.400	4.000	1.400	12.000	-1.000	-1.000	14.600	2.000
38	29.000	4.200	4.000	2.300	10.000	-1.000	-1.000	12.600	2.000
39	28.000	3.300	5.000	2.100	10.000	-1.000	-1.000	11.200	2.000
40	38.000	4.000	4.000	2.500	9.000	-1.000	-1.000	12.600	2.000
41	24.000	4.700	4.000	2.700	9.000	-1.000	-1.000	14.800	2.000
42	51.000	3.900	4.000	2.300	9.000	-1.000	-1.000	12.500	2.000
43	24.000	3.300	5.000	1.900	10.000	-1.000	-1.000	10.700	2.000
44	28.000	4.400	4.000	2.800	8.000	-1.000	-1.000	13.900	2.000
45	15.000	5.300	4.000	1.600	11.000	-1.000	-1.000	16.500	2.000
46	16.000	8.500	4.000	2.800	8.000	-1.000	-1.000	23.500	2.000
47	15.000	8.800	4.000	2.700	9.000	-1.000	-1.000	25.600	2.000
49	16.000	9.900	4.000	2.600	10.000	-1.000	-1.000	24.000	2.000
50	16.000	7.200	4.000	2.300	10.000	-1.000	-1.000	22.700	2.000
51	15.000	8.600	4.000	2.700	9.000	-1.000	-1.000	24.500	2.000
52	17.000	11.000	4.000	3.500	9.000	-1.000	-1.000	31.000	2.000
53	17.000	8.400	4.000	2.700	10.000	-1.000	-1.000	24.000	2.000
54	13.000	10.000	4.000	3.100	9.000	5.000	21.000	26.500	2.000
55	13.000	10.000	4.000	3.400	8.000	4.000	25.000	27.800	2.000
56	12.000	9.900	3.000	4.300	7.000	-1.000	-1.000	28.700	2.000
57	13.000	7.200	4.000	2.400	9.000	2.000	57.000	20.600	2.000
58	14.000	10.000	3.000	6.100	6.000	3.000	36.000	29.600	2.000
59	12.000	8.500	4.000	2.500	9.000	-1.000	-1.000	24.100	2.000
60	13.000	10.000	4.000	13.000	6.000	-1.000	-1.000	29.800	2.000
61	71.000	0.600	15.000	7.300	4.000	2.600	9.000	-1.000	-1.000
62	13.000	8.000	4.000	2.500	9.000	-1.000	-1.000	24.000	2.000
70	12.000	9.400	4.000	3.100	9.000	2.000	70.000	26.600	2.000
71	13.000	8.700	4.000	3.100	9.000	2.000	62.000	23.200	2.000
72	15.000	9.500	4.000	2.400	10.000	-1.000	-1.000	25.200	2.000
73	15.000	8.300	4.000	3.100	9.000	4.000	42.000	24.500	2.000
74	14.000	8.500	4.000	3.200	9.000	-1.000	-1.000	25.800	2.000
75	20.000	8.700	4.000	7.800	7.000	-1.000	-1.000	24.900	2.000
76	12.000	11.000	4.000	3.800	9.000	-1.000	-1.000	29.400	2.000
77	17.000	7.600	4.000	2.900	10.000	-1.000	-1.000	21.100	2.000
78	14.000	7.800	4.000	2.500	10.000	-1.000	-1.000	21.300	2.000
G2-2	25.000	25.000	3.000	2.400	16.000	-1.000	-1.000	88.800	1.000
G2-1	19.000	25.000	3.000	2.100	17.000	-1.000	-1.000	90.100	1.000
1632B-1	24.000	1.600	9.000	0.400	61.000	-1.000	-1.000	4.900	4.000

Table C2. Continued

Elements:	CE	+/-	ND	+/-	SM	+/-	EU	+/-	TB
Units:	PPM	%	PPM	%	PPM	%	PPM	%	PPM
Detection Limits:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	29.000	4.000	12.000	8.000	2.300	4.000	0.700	4.000	0.300
32	34.000	4.000	13.000	7.000	2.500	4.000	0.710	4.000	0.300
33	29.000	4.000	12.000	8.000	2.200	4.000	0.680	4.000	0.300
34	30.000	4.000	12.000	8.000	2.300	4.000	0.690	4.000	0.300
35	28.000	4.000	11.000	8.000	2.100	4.000	0.660	4.000	0.300
36	32.000	4.000	13.000	7.000	2.500	4.000	0.740	3.000	0.400
37	28.000	4.000	13.000	8.000	2.100	4.000	0.650	4.000	0.300
38	24.000	4.000	11.000	9.000	2.000	4.000	0.620	4.000	0.300
39	20.000	4.000	10.000	9.000	1.700	4.000	0.590	4.000	0.300
40	23.000	4.000	10.000	8.000	1.900	4.000	0.620	4.000	0.300
41	28.000	4.000	13.000	8.000	2.300	4.000	0.700	4.000	0.300
42	23.000	4.000	10.000	8.000	1.900	4.000	0.600	4.000	0.300
43	20.000	4.000	7.000	9.000	1.500	4.000	0.540	4.000	0.200
44	25.000	4.000	12.000	7.000	2.200	4.000	0.640	4.000	0.300
45	33.000	4.000	15.000	7.000	2.600	4.000	0.710	3.000	0.300
46	46.000	4.000	21.000	6.000	3.700	4.000	0.900	3.000	0.600
47	50.000	4.000	21.000	6.000	4.000	4.000	0.970	3.000	0.600
49	48.000	4.000	20.000	6.000	3.900	4.000	0.920	3.000	0.700
50	45.000	4.000	20.000	6.000	3.600	4.000	0.890	3.000	0.500
51	47.000	4.000	20.000	6.000	4.000	4.000	0.950	3.000	0.600
52	62.000	4.000	27.000	6.000	5.100	4.000	1.140	3.000	0.800
53	46.000	4.000	21.000	6.000	3.900	4.000	0.940	3.000	0.500
54	51.000	4.000	22.000	6.000	4.500	4.000	1.020	3.000	0.600
55	55.000	4.000	24.000	6.000	4.500	4.000	1.020	3.000	0.700
56	55.000	4.000	23.000	6.000	4.500	4.000	1.030	3.000	0.600
57	40.000	4.000	17.000	6.000	3.400	4.000	0.850	3.000	0.500
58	56.000	4.000	24.000	5.000	4.500	4.000	1.060	3.000	0.600
59	46.000	4.000	20.000	6.000	3.900	4.000	0.950	3.000	0.600
60	55.000	4.000	24.000	6.000	4.600	4.000	1.020	3.000	0.600
61	19.600	2.000	38.000	4.000	17.000	6.000	3.100	4.000	0.800
62	46.000	4.000	21.000	6.000	3.700	4.000	0.890	3.000	0.500
70	70.000	26.600	2.000	53.000	4.000	22.000	6.000	4.400	4.000
71	46.000	4.000	20.000	6.000	3.900	4.000	0.930	3.000	0.600
72	49.000	4.000	22.000	6.000	4.100	4.000	0.960	3.000	0.600
73	47.000	4.000	21.000	6.000	3.800	4.000	0.910	3.000	0.500
74	49.000	4.000	22.000	6.000	4.100	4.000	0.980	3.000	0.600
75	48.000	4.000	21.000	6.000	3.900	4.000	0.880	3.000	0.600
76	57.000	4.000	24.000	6.000	4.700	4.000	1.070	3.000	0.600
77	42.000	4.000	17.000	7.000	3.500	4.000	0.900	3.000	0.500
78	41.000	4.000	17.000	7.000	3.400	4.000	0.860	3.000	0.500
G2-2	164.000	4.000	55.000	5.000	7.100	4.000	1.430	3.000	0.500
G2-1	166.000	4.000	56.000	5.000	7.400	4.000	1.460	3.000	0.500
1632B-1	11.000	9.000	6.000	29.000	0.900	4.000	0.220	13.000	-0.100

Table C2. Continued

Elements:	+/-	YB	+/-	LU	+/-	MASS
Units:	%	PPM	%	PPM	%	PPM
Detection Limits:	0.000	0.000	0.000	0.000	0.000	0.000
31	11.000	0.950	4.000	0.160	7.000	1.457
32	11.000	1.000	4.000	0.100	7.000	1.531
33	12.000	0.880	5.000	0.140	7.000	1.541
34	15.000	0.950	4.000	0.160	7.000	1.472
35	14.000	0.840	4.000	0.140	7.000	1.612
36	10.000	1.050	4.000	0.160	7.000	1.641
37	15.000	0.890	4.000	0.150	7.000	1.385
38	13.000	0.910	4.000	0.140	8.000	1.375
39	14.000	0.830	4.000	0.130	8.000	1.479
40	13.000	0.930	4.000	0.150	7.000	1.473
41	12.000	1.100	4.000	0.180	7.000	1.499
42	11.000	0.880	4.000	0.140	7.000	1.383
43	15.000	0.720	4.000	0.110	8.000	1.405
44	10.000	0.990	4.000	0.150	7.000	1.432
45	11.000	1.010	4.000	0.170	7.000	1.540
46	8.000	1.710	3.000	0.260	7.000	1.640
47	7.000	1.800	3.000	0.270	6.000	1.711
49	8.000	1.950	3.000	0.310	6.000	1.318
50	8.000	1.630	3.000	0.250	7.000	1.521
51	8.000	1.930	3.000	0.290	7.000	1.365
52	8.000	2.270	3.000	0.350	7.000	1.208
53	9.000	1.750	3.000	0.280	7.000	1.364
54	8.000	2.230	3.000	0.360	6.000	1.467
55	7.000	2.080	3.000	0.340	6.000	1.336
56	7.000	1.890	3.000	0.310	6.000	1.598
57	8.000	1.510	3.000	0.250	6.000	1.673
58	7.000	1.880	3.000	0.320	6.000	1.796
59	7.000	1.630	3.000	0.270	6.000	1.554
60	8.000	1.890	3.000	0.310	6.000	1.435
61	9.000	1.520	3.000	0.240	7.000	1.524
62	8.000	1.630	3.000	0.260	6.000	1.743
70	7.000	2.040	3.000	0.330	6.000	1.450
71	8.000	1.900	3.000	0.300	6.000	1.494
72	8.000	1.800	3.000	0.280	7.000	1.682
73	9.000	1.660	3.000	0.250	7.000	1.602
74	9.000	1.640	3.000	0.260	7.000	1.485
75	8.000	1.630	3.000	0.270	7.000	1.713
76	8.000	1.970	3.000	0.320	7.000	1.495
77	9.000	1.560	3.000	0.260	7.000	1.672
78	9.000	1.530	3.000	0.250	7.000	1.776
G2-2	14.000	0.860	6.000	0.110	12.000	0.775
G2-1	14.000	0.830	7.000	0.120	11.000	0.576
1632B-1	-1.000	0.420	12.000	0.070	19.000	0.424

Table C2. Continued

Sample:	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CD PPM	V PPM	HG PPB
#31	11.	7.	12.	<0.2	13.	<0.3	15.	10
#32	7.	7.	11.	<0.2	11.	<0.3	19.	10
#33	7.	7.	8.	<0.2	11.	<0.3	17.	10
#34	7.	6.	15.	<0.2	12.	0.3	19.	5
#35	7.	7.	12.	<0.2	10.	<0.3	15.	5
#36	8.	8.	14.	<0.2	12.	0.3	28.	5
#37	7.	7.	14.	<0.2	12.	<0.3	17.	10
#38	7.	8.	22.	<0.2	15.	0.6	20.	10
#39	7.	7.	22.	<0.2	16.	0.7	21.	10
#40	8.	8.	32.	<0.2	22.	0.8	29.	10
#41	8.	8.	31.	<0.2	19.	0.8	28.	10
#42	8.	8.	31.	<0.2	19.	0.7	26.	15
#43	7.	7.	19.	0.2	14.	0.5	19.	10
#44	9.	8.	32.	<0.2	21.	0.8	30.	10
#45	6.	9.	18.	<0.2	12.	0.3	17.	10
#46	17.	14.	44.	<0.2	26.	0.3	38.	25
#47	17.	14.	49.	<0.2	28.	0.4	42.	25
#49	20.	22.	58.	<0.2	39.	0.4	61.	30
#50	9.	10.	32.	<0.2	20.	0.4	30.	20
#51	18.	16.	59.	<0.2	37.	0.4	48.	20
#52	24.	22.	74.	<0.2	47.	0.4	69.	30
#53	19.	17.	54.	<0.2	38.	0.4	47.	20
#54	17.	16.	60.	<0.2	42.	0.3	52.	25
#55	20.	21.	69.	<0.2	38.	0.7	53.	40
#56	15.	16.	55.	<0.2	27.	0.5	50.	25
#57	12.	12.	43.	<0.2	21.	0.3	37.	15
#58	15.	17.	60.	<0.2	26.	0.8	47.	25
#59	12.	13.	44.	<0.2	22.	0.3	36.	25
#60	18.	28.	76.	<0.2	32.	1.7	54.	30
#61	16.	13.	52.	<0.2	30.	0.3	43.	25
#62	15.	14.	53.	<0.2	25.	0.3	43.	25
#70	18.	19.	67.	<0.2	40.	0.4	54.	25
#71	22.	18.	71.	<0.2	41.	0.5	56.	20
#72	16.	14.	54.	<0.2	30.	0.4	43.	30
#73	12.	13.	40.	<0.2	20.	0.5	33.	15
#74	13.	13.	44.	<0.2	24.	0.5	38.	25
#75	18.	25.	61.	<0.2	31.	1.6	53.	5
#76	18.	20.	67.	<0.2	34.	1.3	53.	40
#77	13.	11.	50.	0.3	28.	0.5	41.	25
#78	13.	12.	47.	<0.2	28.	0.5	40.	25

Table C2. Continued

Sample #	SiO2 %	TiO2 %	Al2O3 %	Fe2O3 %	MnO %	MgO %	CaO %	Na2O %	K2O %	P2O5 %	Ba ppm	Sr ppm	Zr ppm	Y ppm	LOI %	Total %
31	79.05	0.18	10.16	1.15	0.02	0.41	1.72	2.33	3.68	0.10	1135	292	94	10	1.10	99.90
32	78.85	0.19	10.39	1.31	0.02	0.39	1.70	2.41	3.78	0.08	1191	307	75	8	1.14	100.26
33	79.23	0.18	10.54	1.19	0.02	0.33	1.57	2.43	3.78	0.10	1211	305	94	8	0.98	100.32
34	78.40	0.19	10.85	1.24	0.02	0.44	1.84	2.53	3.66	0.08	1170	313	109	10	1.30	100.55
35	78.40	0.17	10.45	1.12	0.02	0.36	1.76	2.33	3.90	0.08	1255	307	70	8	1.25	99.82
36	76.95	0.21	11.01	1.28	0.02	0.45	1.99	2.51	3.64	0.10	1172	315	130	10	1.38	99.53
37	77.38	0.18	10.98	1.19	0.02	0.43	1.83	2.40	3.82	0.08	1200	312	95	10	1.28	99.56
38	79.69	0.13	9.81	1.07	0.02	0.29	2.23	2.27	3.18	0.18	1211	280	117	8	1.70	100.56
39	79.12	0.11	9.74	0.98	0.02	0.26	2.23	2.24	3.14	0.18	1178	276	53	8	1.68	99.71
40	78.48	0.16	9.75	1.20	0.02	0.38	2.39	2.16	3.08	0.20	1075	295	83	8	2.45	100.27
41	78.06	0.19	10.15	1.22	0.02	0.40	2.26	2.21	3.12	0.18	1131	289	133	10	2.10	99.90
42	78.77	0.13	9.52	1.11	0.01	0.37	2.16	2.09	3.10	0.18	1076	285	57	8	2.19	99.64
43	78.76	0.11	9.99	0.96	0.01	0.25	1.86	2.22	3.30	0.14	1123	284	51	8	1.47	99.06
44	79.01	0.17	9.76	1.29	0.02	0.38	2.33	2.09	3.14	0.22	1109	296	88	10	2.31	100.70
45	78.00	0.23	11.24	1.37	0.03	0.42	1.57	2.48	3.72	0.10	1198	315	134	12	1.33	100.47
46	67.85	0.42	12.43	2.75	0.06	1.41	3.78	2.37	3.08	0.22	947	315	147	14	4.77	99.12
47	68.89	0.46	12.88	3.12	0.07	1.47	2.83	2.51	3.16	0.24	971	320	167	14	3.84	99.46
49	69.46	0.48	12.81	3.50	0.07	1.48	2.13	2.30	2.98	0.14	895	282	149	16	4.16	99.50
50	72.53	0.35	12.37	2.01	0.04	0.82	2.53	2.75	3.34	0.16	1007	322	184	14	2.49	99.37
51	68.11	0.46	12.45	3.42	0.05	1.64	3.41	2.21	2.88	0.18	889	282	164	16	5.13	99.96
52	62.38	0.62	13.10	4.33	0.07	2.12	5.65	2.31	2.58	0.18	773	290	184	18	6.67	100.03
53	65.87	0.47	12.26	3.32	0.05	1.58	4.88	2.28	2.86	0.14	877	280	179	14	5.92	99.65
54	67.19	0.61	14.26	4.34	0.07	1.62	2.07	2.45	2.78	0.08	851	288	235	22	3.83	99.32
55	60.82	0.59	13.27	3.94	0.07	2.03	6.24	2.48	2.60	0.24	767	315	205	18	7.59	99.88
56	66.35	0.52	13.41	3.31	0.06	1.63	4.03	2.70	2.90	0.22	877	348	225	18	4.64	99.76
57	71.45	0.44	13.16	3.01	0.06	1.17	2.15	2.67	3.18	0.12	936	312	158	16	3.05	100.47
58	65.84	0.55	13.62	3.84	0.05	1.72	4.27	3.21	2.96	0.20	823	353	209	18	3.99	100.27
59	69.78	0.46	12.84	2.74	0.05	1.17	2.04	2.63	3.26	0.12	948	311	180	16	3.25	98.35
60	50.16	0.58	12.11	4.01	0.07	2.10	12.83	3.15	2.24	0.20	527	342	143	18	11.48	98.93
61	71.44	0.42	12.56	2.97	0.06	1.25	2.13	2.49	3.26	0.16	964	295	321	16	2.88	99.59
62	70.41	0.47	13.43	3.12	0.06	1.27	2.17	2.76	3.16	0.16	936	317	150	16	2.95	99.96
70	64.99	0.59	13.49	3.96	0.07	1.91	3.95	2.45	2.80	0.20	812	287	213	20	5.32	99.73
71	65.15	0.56	13.01	4.09	0.07	2.04	4.63	2.29	2.62	0.22	828	291	169	16	5.80	100.49
72	69.73	0.51	13.35	3.38	0.06	1.47	2.34	2.51	3.10	0.12	926	304	152	18	3.73	100.31

Table C2. Continued

Sample #	SiO2 %	TiO2 %	Al2O3 %	Fe2O3 %	MnO %	MgO %	CaO %	Na2O %	K2O %	P2O5 %	Ba ppm	Sr ppm	Zr ppm	Y ppm	LOI %	Total %
73	70.23	0.41	12.51	2.59	0.04	1.15	3.46	2.56	3.36	0.16	1001	322	166	14	3.11	99.59
74	70.18	0.45	13.09	2.79	0.04	1.28	3.29	2.46	3.28	0.18	912	307	211	16	3.47	100.51
75	56.29	0.53	11.86	3.69	0.06	2.14	8.85	4.05	2.46	0.20	650	351	126	16	8.99	99.11
76	62.48	0.59	13.53	3.98	0.06	2.04	5.82	2.65	2.84	0.20	710	272	185	18	5.49	99.69
77	71.63	0.42	12.28	2.80	0.07	1.34	2.69	2.53	3.30	0.26	960	309	188	16	2.89	100.19
78	70.12	0.41	12.88	2.69	0.07	1.31	2.74	2.49	3.28	0.24	973	306	162	16	2.93	99.17
UB-N	39.99	0.10	2.98	8.37	0.13	34.70	1.22	0.11	0.04	0.0445	10	4	4	11.75	99.42	
SY2	59.55	0.13	12.11	6.34	0.33	2.69	7.88	4.44	4.54	0.42	468	268	282	132	1.00	99.42
GH	75.33	0.07	12.77	1.35	0.05	0.02	0.73	3.83	4.82	0.0215	8	16876	0.60	99.56		

APPENDIX D

Concentrations of Elements in Water

All concentrations are ppb except for Au which are ppt, and Ag, Ba, Br, Ca, Cs, Cu, Hf, Hg, Lu, Na, Se, V, Nd, Eu, Tb, and Yb which are ppm. Negative signs should be read as less-than signs. Before elemental concentrations they indicate that the element was not detected; the number following a minus sign is the limit of detection.

Elements:	AU	+/-	AG	+/-	AS	+/-	BA	+/-
Units:	PPT	%	PPM	%	PPB	%	PPM	%
Detection Limits:	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10G-BLANK	-2.000	-1.000	-0.005	-1.000	-1.000	-1.000	-0.100	-1.000
10G-1	-100.000	-1.000	-0.005	-1.000	-100.000	-1.000	-5.000	-1.000
10G-3	-100.000	-1.000	-0.005	-1.000	-100.000	-1.000	-5.000	-1.000
18G-BLANK	16.000	30.000	-0.005	-1.000	-1.000	-1.000	-0.100	-1.000
18G-1	-100.000	-1.000	-0.005	-1.000	-100.000	-1.000	-5.000	-1.000
18G-2	-100.000	-1.000	-0.005	-1.000	-100.000	-1.000	-5.000	-1.000
25S-BLANK	-2.000	-1.000	-0.005	-1.000	-1.000	-1.000	-0.100	-1.000
25S-2	-100.000	-1.000	-0.005	-1.000	-100.000	-1.000	-5.000	-1.000
24Z-BLANK	-2.000	-1.000	-0.005	-1.000	-1.000	-1.000	0.500	-1.000
24Z-1	-100.000	-1.000	-0.005	-1.000	-100.000	-1.000	-5.000	-1.000
24Z-4	-100.000	-1.000	-0.006	-1.000	-100.000	-1.000	-5.000	-1.000
NBS-1632B	-1050.000	-1.000	-0.083	-1.000	3200.000	8.000	70.000	10.000

Elements:	BR	+/-	CS	+/-	HF	+/-	HG	+/-
Units:	PPM	%	PPM	%	PPM	%	PPM	%
Detection Limits:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10G-BLANK	0.150	2.000	-0.001	-1.000	-0.001	-1.000	-0.001	-1.000
10G-1	61.000	1.000	-0.001	-1.000	-0.001	-1.000	-0.002	-1.000
10G-3	38.000	1.000	0.004	74.000	-0.001	-1.000	-0.002	-1.000
18G-BLANK	-0.050	-1.000	-0.001	-1.000	-0.001	-1.000	-0.001	-1.000
18G-1	10.000	1.000	-0.001	-1.000	-0.001	-1.000	-0.001	-1.000
18G-2	84.000	1.000	0.058	6.000	-0.001	-1.000	-0.002	-1 000
25S-BLANK	0.050	2.000	0.001	44.000	-0.001	-1.000	-0.001	-1.000
25S-2	86.000	1.000	-0.001	-1.000	-0.001	-1.000	-0.003	-1.000
24Z-BLANK	-0.050	-1.000	0.001	68.000	-0.001	-1.000	-0.001	-1.000
24Z-1	68.000	1.000	0.054	6.000	-0.001	-1.000	-0.002	-1.000
24Z-4	160.000	1.000	0.095	5.000	-0.001	-1.000	-0.004	-1.000
NBS-1632B	17.000	1.000	0.430	11.000	0.780	7.000	-0.040	-1.000

Elements:	IR	+/-	NA	+/-	RB	+/-	SB	+/-
Units:	PPB	%	PPM	%	PPB	%	PPB	%
Detection Limits:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10G-BLANK	-0.010	-1.000	3.400	5.000	-10.000	-1.000	-1.000	-1.000
10G-1	-0.010	-1.000	4600.000	2.000	-100.000	-1.000	-10.000	-1.000
10G-3	-0.010	-1.000	2690.000	2.000	-100.000	-1.000	-10.000	-1.000
18G-BLANK	-0.010	-1.000	1.500	5.000	-10.000	-1.000	-1.000	-1.000
18G-1	-0.010	-1.000	1720.000	2.000	-100.000	-1.000	-10.000	-1.000
18G-2	-0.010	-1.000	7860.000	2.000	-100.000	-1.000	-10.000	-1.000
25S-BLANK	-0.010	-1.000	0.500	5.000	-10.000	-1.000	-1.000	-1.000
25S-2	-0.010	-1.000	7180.000	2.000	-100.000	-1.000	-10.000	-1.000
24Z-BLANK	-0.010	-1.000	1.100	5.000	-10.000	-1.000	-1.000	-1.000
24Z-1	-0.010	-1.000	6310.000	2.000	-100.000	-1.000	-10.000	-1.000
24Z-4	-0.020	-1.000	14400.000	2.000	-100.000	-1.000	-10.000	-1.000
NBS-1632B	-0.200	-1.000	525.000	1.000	5800.000	22.000	260.000	13.000

Elements:	SC	+/-	SE	+/-	TA	+/-	TH	+/-
Units:	PPB	%	PPB	%	PPM	%	PPB	%
Detection Limits:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10G-BLANK	-0.500	-1.000	-0.001	-1.000	-1.000	-1.000	-2.000	-1.000
10G-1	1.300	7.000	-0.004	-1.000	-1.000	-1.000	-2.000	-1.000
10G-3	1.900	7.000	-0.004	-1.000	-1.000	-1.000	-2.000	-1.000
18G-BLANK	-0.500	-1.000	-0.001	-1.000	-1.000	-1.000	-2.000	-1.000
18G-1	0.900	6.000	-0.002	-1.000	-1.000	-1.000	-2.000	-1.000
18G-2	-0.500	-1.000	-0.004	-1.000	-1.000	-1.000	-2.000	-1.000
25S-BLANK	-0.500	-1.000	-0.001	-1.000	-1.000	-1.000	-2.000	-1.000
25S-2	1.600	8.000	-0.006	-1.000	-1.000	-1.000	-2.000	-1.000
24Z-BLANK	-0.500	-1.000	-0.001	-1.000	-1.000	-1.000	-2.000	-1.000
24Z-1	-0.500	-1.000	-0.004	-1.000	-1.000	-1.000	-2.000	-1.000
24Z-4	0.800	15.000	-0.008	-1.000	-1.000	-1.000	-2.000	-1.000
NBS-1632B	2300.000	2.000	1.400	18.000	160.000	24.000	1800.000	6.000

Elements:	U	+/-	W	+/-	LA	+/-	CE	+/-
Units:	PPB	%	PPM	%	PPB	%	PPB	%
Detection Limits:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10G-BLANK	-0.001	-1.000	-1.000	-1.000	-1.000	-1.000	-5.000	-1.000
10G-1	-0.005	-1.000	-50.000	-1.000	-1.000	-1.000	-5.000	-1.000
10G-3	-0.005	-1.000	-50.000	-1.000	-1.000	-1.000	-5.000	-1.000
18G-BLANK	-0.001	-1.000	-1.000	-1.000	-1.000	-1.000	-5.000	-1.000
18G-1	-0.005	-1.000	-50.000	-1.000	-1.000	-1.000	-5.000	-1.000
18G-2	-0.005	-1.000	-50.000	-1.000	-1.000	-1.000	-5.000	-1.000
25S-BLANK	-0.001	-1.000	-1.000	-1.000	-1.000	-1.000	-5.000	-1.000
25S-2	-0.005	-1.000	-50.000	-1.000	-1.000	-1.000	-5.000	-1.000
24Z-BLANK	-0.001	-1.000	-1.000	-1.000	-1.000	-1.000	-5.000	-1.000
24Z-1	-0.005	-1.000	-50.000	-1.000	-1.000	-1.000	-5.000	-1.000
24Z-4	-0.005	-1.000	-50.000	-1.000	-1.000	-1.000	-5.000	-1.000
NBS-1632B	0.410	39.000	520.000	40.000	4500.000	8.000	9600.000	10.000

Elements:	ND	+/-	SM	+/-	EU	+/-	TB	+/-
Units:	PPM	%	PPB	%	PPM	%	PPM	%
Detection Limits:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10G-BLANK	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
10G-1	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
10G-3	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
18G-BLANK	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
18G-1	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
18G-2	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
25S-BLANK	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
25S-2	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
24Z-BLANK	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
24Z-1	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
24Z-4	-0.010	-1.000	-1.000	-1.000	-0.001	-1.000	-0.001	-1.000
NBS-1632B	4.300	15.000	850.000	6.000	0.172	8.000	0.170	14.000

Elements:	YB	+/-	LU	+/-	Mass
Units:	PPM	%	PPM	%	g
Detection Limits:	0.000	0.000	0.000	0.000	0.000
10G-BLANK	-0.007	-1.000	-0.001	-1.000	100.000
10G-1	-0.053	-1.000	-0.001	-1.000	100.000
10G-3	-0.059	-1.000	-0.001	-1.000	50.000
18G-BLANK	-0.006	-1.000	0.001	48.000	100.000
18G-1	-0.023	-1.000	0.003	65.000	100.000
18G-2	-0.065	-1.000	-0.001	-1.000	100.000
25S-BLANK	-0.006	-1.000	-0.001	-1.000	100.000
25S-2	-0.089	-1.000	0.012	56.000	50.000
24Z-BLANK	-0.006	-1.000	0.001	64.000	100.000
24Z-1	-0.055	-1.000	-0.001	-1.000	100.000
24Z-4	-0.122	-1.000	0.009	100.000	50.000
NBS-1632B	63.000	6.000	0.060	11.000	1.395

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