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Sampling Northwestern New Jersey for *Sorex*
palustris, *Microtus chrotorrhinus*, and
Desmognathus ochrophaeus

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INTRODUCTION

There are a number of species whose status in New Jersey is undetermined. Among these species there are several candidates that have a strong possibility of occurring in the northwest corner of the state. These candidate species include two mammalian species, the rock vole (*Microtus chrotorrhinus*) and the water shrew (*Sorex palustris*), and one herptile, the mountain dusky salamander (*Desmognathus ochrophaeus*).

The geographic range of *M. chrotorrhinus* extends across eastern Canada from Labrador and the Maritime Provinces to southwestern Ontario and adjacent northeastern Minnesota and constricts sharply southward through the Adirondack Mountains of New York and on into the Appalachian Mountains to North Carolina and Tennessee (see Kirkland and Jannett, 1982, Fig. 3). Populations within this range appear to exist in discrete isolated pockets. This apparently is due to its restricted habitat requirements. Rocks and talus are important habitat features as is water, either in the form of surface or subsurface streams (Jannett, per. comm.; Kirkland and Knipe, 1979; Martin, 1971; Wyman 1923). Important herbaceous correlates include bunchberry (*Cornus canadensis*), bluebead lily (*Clintonia borealis*), Canada mayflower (*Maianthemum canadense*), false miterwort (*Tiarella cordifolia*), violets (*Viola* sp.), common wood sorrel (*Oxalis montana*), *Vaccinium* spp., Labrador tea (*Ledum groenlandicum*), false Solomon's seal (*Smilacina* sp.), goldenrods (*Solidago* sp.), mosses, and ferns (Goodwin, 1929; Jannett, pers. comm.; Kirkland and Knipe, 1979; Martin, 1971; Roscoe and Majka, 1976; Timm et al., 1977; Whitaker and Martin, 1977). Although the rock vole has never been captured in New Jersey, suitable habitats do exist in the northwest portion of the state.

The northeastern part of the distribution of *S. palustris* is almost coincident with that of *M. chrotorrhinus* (Hall, 1981). As its name implies, this species is rarely found far from surface waters. Typically, water shrews are found among the rocks, logs and crevices along the banks of swift-flowing streams. Vegetational correlates include an herb layer made up of various grasses and sedges, and a shrub layer consisting of willows (*Salix* sp) and alder (*Alnus* sp). Once again, the northwestern part of New Jersey offers habitats that are consistent with reports indicating water shrew presence.

As in the two previous species, the range of the mountain dusky salamander supposedly includes northwestern New Jersey. This species is normally found in saturated soil under stones, logs, leaves and other debris near springs, streams or seepage areas (Conant, 1975). For the most part, *D. ochrophaeus* is found at elevations in excess of several hundred feet above sea level.

All three target species have very similar geographic ranges and gross habitat requirements. Based on the existing literature, *S. palustris* and *D. ochrophaeus* occur in very similar habitat. *M. chrotorrhinus* has the added habitat feature of large boulders.

STUDY AREAS

Ten sampling sites were selected in northwestern New Jersey: five for *M. chrotorrhinus* and five for *S. palustris* - *D. ochrophaeus*.

Microtus chrotorrhinus

Sampling sites for the rock vole are shown in Figures 1A, 1B, 1C, and 1D. These sites were selected based on associated physiographic and vegetational features of the habitat.

Sorex palustris and *Desmognathus ochrophaeus*

Sampling sites for the water shrew and the mountain dusky salamander are shown in Figures 2A, 2B, 2C, and 2D. All five sites were located in hydric habitats. These sites supported a rich diversity of aquatic invertebrates - important food items for the water shrew (Conaway, 1952; Linzey and Linzey 1973) - and numerous rocks and logs - important habitat features for both target species (Baker, 1983; Banfield, 1974; Conaway, 1952; Conant, 1975).

The Roy study site was located approximately 3/8th of a mile north of Roy Bridge off route 615 in Walpack Township. The trapping arrays were set up on the east and west shores of the Big Flat Brook at this location. The brook's banks (0-1m high) are composed of sandy alluvial soils and dominated by spicebush (*Lindera benzoin*) and grasses.

The Frank study site was located on the Big Flat Brook in Flatbrookville approximately 1 mile north of the Old Mine Road Bridge. This site is identical to the Roy study site with the exception that the overhanging banks are 1 to 3 meters high and some goldenrods (*Salidago* spp.) are present.

The Millbrook study site was located on the banks of Vancampens Brook approximately one half mile north of Old Millbrook Village. Oaks (*Quercus* spp.), maples (*Acer* spp.), black birch (*Betula lenta*), and spicebush (*Lindera benzoin*) dominate the rocky shoreline at this site. Woodferns (*Dryopteris* spp.) and New York ferns (*Thelypteris noveboracensis*) make up most of the herb layer.

The Steeny Kill study site was located along an unnamed stream just off an old wood road approximately 3/4 mile west of Steeny Kill Lake in High Point State Park. The dense canopy was dominated by red oaks (*Quercus rubra*) and sugar maples (*Acer saccharum*). Beech (*Fagus grandifolia*), hickories (*Carya* spp.) and black birch (*Betula lenta*) were also present. The sub-canopy was composed of sugar maples (*Acer saccharum*) and hickories (*Carya* spp.). The spare shrub layer was made up of spicebush (*Lindera benzoin*), while the herb layer included indian cucumber-root (*Medeola virginiana*), Canada Mayflower (*Maianthemum canadense*) and a variety of different kinds of mosses.

The Steam Mill study site was located in the flood plain of the Big Flat Brook approximately 1.25 miles west of the intersection of Crigger Road and Steam Mill Trail in Stokes State Forest. The canopy at this site was sparse, dominated by red maple (*Acer rubrum*) and green ash (*Fraxinus pennsylvanica*). Black birch (*Betula lenta*), shagbark hickory (*Carya ovata*), and beech composed a small percentage of canopy. The sub-canopy contained both ironwood (*Carpinus caroliniana*) and hornbeam (*Ostrya virginiana*), and spicebush (*Lindera benzoin*) dominated the shrub layer. The herb layer was substantial and dominated by New York ferns (*Thelypteris noveboracensis*). The ground is practically devoid of large rocks however, spring floods have deposited numerous logs and organic debris.

Perhaps the most significant finding of this study was the discovery of *Sorex hoyi* at both the Steam Mill and Steeny Kill study sites (these sites are approximately 7mi apart). These captures represent the first specimens of this species taken in New Jersey. Additionally, the capture of a single *Sorex dispar* at the Steeny Kill site represents only the second time this species has been taken in New Jersey (see Davis 1956).

Species diversity at each study site is illustrated in Figure 13. Not surprisingly, the study sites with the greatest visual estimate of habitat diversity (i.e. Millbrook, Saw Mill, and Wapalanne) showed the greatest species diversity. Likewise, the study sites with the lowest habitat diversity (e.g. the boulder fields at Yards Creek and Ice Cave), exhibited the lowest species diversity.

DISCUSSION

Pitfall trapping appears to be superior to live trapping in harvesting many small mammals. This is probably due to several factors. First, the effectiveness of pitfall trapping is greatly enhanced by the use of aluminum flashing between pitfalls. This is illustrated by the fact that the lone pitfall at the center of all arrays produced only three captures. Secondly, the mean body weight of the most frequently caught mammal (*Sorex cinereus*, Figure 8 and 9) was only 4.4 grams (n=75) -live traps are notorious for excluding low body weight animal, presumably due to the limitations of the triggering mechanism of the trap. *Peromyscus leucopus*, representing the next most frequently captured species, were captured most often in live and snap traps (79%). This species weighed an average of 21 grams. And third, based on the feeding strategies and ranging patterns of shrews, it seems likely that the pitfall arrays would be more effective in capturing these animals (Beneski and Stinson, 1987; Kirkland per. com.; Kirkland et al. unpublished ms.).

Despite the relatively low productivity of live trapping, live traps are still useful in sampling studies. One obvious advantage of live trapping is the ability to locate traps in specific microhabitats that are likely to yield captures of target species (e.g. in runways, at tunnel entrances, etc.). Another advantage is that live traps can be placed in areas that are not conducive to pitfall trapping (e.g. in boulder fields).

The advantage of using snap traps are many. Snap traps are inexpensive, easy to transport, ideal for placing in small concealed locations and, most importantly, they have been shown to be more efficient at capturing certain kinds of small mammals (Pizzimenti, 1979; Wiemer, 1972). The combination of pitfalls, live traps and snap traps appears to be ideal for censusing a variety of animals in a variety of different habitats.

Despite using a variety of trapping techniques in appropriate habitats, none of the three target species were captured over the course of the study. The productivity of the trapping effort at each of the 10 study sites implies that the trapping protocol generated a sample representative of the species in residence. In fact, the capture of one species (*Sorex hoyi*) previously unknown to New Jersey, and another (*Sorex dispar*) not recorded for 33 years are testimonial to the effectiveness of the trapping protocol.

The selection of study sites for this investigation was not taken lightly. Using the existing literature on each species as a guide, numerous potential study sites were investigated in Sussex and Warren Counties. Although great care was given to the selection of study sites, there are undoubtedly more locations in northwest New Jersey that have the potential of producing one or more of the three target species in this study.

Appendix A

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Frank	8/6/89	P	158						<i>Rana utricularia</i>	
Frank	8/6/89	P	159						<i>Notophthalmus viridescens</i>	
Frank	8/6/89	L	160	3.5	60	36	F	L	<i>Sorex cinereus</i>	Dead in Trap
Frank	8/7/89	P	163	20.5	80	122	F	NR	<i>Zapus hudsonius</i>	
Frank	8/7/89	P	164	4	57	38	M	S	<i>Sorex cinereus</i>	Penis visible
Frank	8/7/89	P	165	17.5	71	104	M	S	<i>Zapus hudsonius</i>	
Frank	8/7/89	P	166	3.5	50	33			<i>Sorex cinereus</i>	
Frank	8/7/89	P	167	6.5	64	39	F	L	<i>Sorex cinereus</i>	
Frank	8/8/89	P	174	4	55	36	M	S	<i>Sorex cinereus</i>	Penis visible
Frank	8/8/89	L	175	6.5	62	41			<i>Sorex fumeus</i>	Dead in Trap
Frank	8/9/89	P	187	18	75	111	M	S	<i>Zapus hudsonius</i>	
Frank	8/9/89	P	188	3.5	53	35			<i>Sorex cinereus</i>	
Frank	8/9/89	P	189	22	78	132	F	Pg L	<i>Zapus hudsonius</i>	
Frank	8/9/89	P	190	15.5	72	76	F	NR	<i>Peromyscus leucopus</i>	
Frank	8/10/89	P	201	5.5	56	40			<i>Sorex fumeus</i>	
Frank	8/10/89	P	202	5	57	38			<i>Sorex fumeus</i>	
Frank	8/10/89	P	203	19	77	120	F	NR	<i>Zapus hudsonius</i>	
Frank	8/10/89	P	204	44.5	110	38	F	L	<i>Microtus pennsylvanicus</i>	
Frank	8/10/89	L	/	12.5	80	23			<i>Blarina brevicauda</i>	Released
Frank	8/11/89	P	215	40.5	100	45	F	NR	<i>Microtus pennsylvanicus</i>	
Frank	8/11/89	P	216	35	101	43	M	S	<i>Microtus pennsylvanicus</i>	
Frank	8/11/89	P	217	16	71	115	F	NR	<i>Zapus hudsonius</i>	
Frank	8/12/89	P	242	3	52	36			<i>Sorex cinereus</i>	
Frank	8/12/89	P	243	4	56	34	M	S	<i>Sorex cinereus</i>	
Frank	8/12/89	P	244	15	90	24			<i>Blarina brevicauda</i>	
Frank	8/12/89	P	245	3	50	35			<i>Sorex cinereus</i>	
Frank	8/12/89	P	246	3	51	37			<i>Sorex cinereus</i>	
Frank	8/12/89	L	247	13	78	25			<i>Blarina brevicauda</i>	Dead in Trap
Frank	8/12/89	L	248	16	89	26			<i>Blarina brevicauda</i>	Dead in Trap
Frank	8/12/89	P	249						<i>Bufo americanus</i>	
Frank	8/12/89	P	251	14.5	73	124	F	NR	<i>Napaeozapus insignis</i>	
Frank	8/12/89	P	252	16.5	75	116	M	S	<i>Zapus hudsonius</i>	
Frank	8/12/89	P	253	5	61	40			<i>Sorex cinereus</i>	
Ice Cave	8/17/89			No Captures						
Ice Cave	8/18/89			No Captures						
Ice Cave	8/19/89	S	290	30	85	92	M	S	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	S	291	37	92	80	F	Pg L	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	S	292	21.5	82	80	M	S	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	S	293	33	86	76	F	Pg L	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	L	/	16			F	NR	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/19/89	L	/	28			M	S	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/20/89	S	296	11	61	56	M	NS	<i>Peromyscus leucopus</i>	
Ice Cave	8/20/89	L	/	12			F	NR	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/20/89	L	/	27			F	Pg L	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/21/89			No Captures						
Ice Cave	8/22/89	S	298	22.5	88	69	M	S	<i>Peromyscus leucopus</i>	
Ice Cave	8/22/89	S	299	16.5	78	65	M	S	<i>Peromyscus leucopus</i>	Juven. Pelage
Ice Cave	8/23/89	L	/	19.5			F	NR	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/24/89	L	300	14	74	26			<i>Blarina brevicauda</i>	Dead in Trap
Ice Cave	8/25/89	S	301	5.5	63	50	M	S	<i>Sorex fumeus</i>	Uniform Gray
Ice Cave	8/26/89	L	/	20.5			F	Pg L	<i>Peromyscus leucopus</i>	Released
Millbrook	8/2/89	P	80	17	72	120	F	NR	<i>Zapus hudsonius</i>	
Millbrook	8/2/89	P	81	21	85	132	M	S	<i>Napaeozapus insignis</i>	
Millbrook	8/2/89	P	82	5	65	40			<i>Sorex fumeus</i>	
Millbrook	8/2/89	P	83	21	85	73	M	S	<i>Peromyscus leucopus</i>	

Appendix A

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Millbrook	8/2/89	P	84						<i>Rana utricularia</i>	
Millbrook	8/2/89	P	85						<i>Eurycea bislineata bislineata</i>	
Millbrook	8/2/89	L	/	19.5	80	71	M	S	<i>Peromyscus leucopus</i>	Released
Millbrook	8/3/89	P	89						<i>Rana utricularia</i>	
Millbrook	8/3/89	P	90						<i>Rana catesbeiana</i>	
Millbrook	8/3/89	P	91						<i>Notophthalmus viridescens</i>	
Millbrook	8/3/89	P	92						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/3/89	P	93						<i>Bufo americanus</i>	
Millbrook	8/3/89	P	94						<i>Bufo americanus</i>	
Millbrook	8/3/89	P	95						<i>Bufo americanus</i>	
Millbrook	8/3/89	P	96						<i>Rana utricularia</i>	
Millbrook	8/3/89	P	97						<i>Rana utricularia</i>	
Millbrook	8/3/89	P	98	5.5	60	38			<i>Sorex cinereus</i>	
Millbrook	8/3/89	P	99	5.5	64	44			<i>Sorex fumeus</i>	
Millbrook	8/3/89	P	100	5	62	46			<i>Sorex fumeus</i>	
Millbrook	8/3/89	P	101	6	65	45			<i>Sorex fumeus</i>	
Millbrook	8/3/89	P	102	19	100	22			<i>Blarina brevicauda</i>	
Millbrook	8/3/89	P	103	4.5	55	37			<i>Sorex cinereus</i>	
Millbrook	8/3/89	P	104	6	68	45			<i>Sorex fumeus</i>	
Millbrook	8/3/89	L	/	17.5	93	22			<i>Blarina brevicauda</i>	Released
Millbrook	8/3/89	L	/	17.5			M	S	<i>Peromyscus leucopus</i>	Released
Millbrook	8/3/89	L	/	20	84	74	F	L	<i>Peromyscus leucopus</i>	Released
Millbrook	8/3/89	P	L	5.5	64	40			<i>Sorex cinereus</i>	Dead in Trap
Millbrook	8/4/89	P	120	12	68	133			<i>Napaeozapus insignis</i>	
Millbrook	8/4/89	P	121	7	70	40			<i>Sorex fumeus</i>	
Millbrook	8/5/89	P	133						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/5/89	P	134	11.5	70	130	F	NR	<i>Napaeozapus insignis</i>	
Millbrook	8/5/89	P	135	16	91	22			<i>Blarina brevicauda</i>	
Millbrook	8/5/89	P	139						<i>Bufo americanus</i>	
Millbrook	8/5/89	P	140						<i>Rana utricularia</i>	
Millbrook	8/5/89	P	141						<i>Bufo americanus</i>	
Millbrook	8/5/89	P	142						<i>Bufo americanus</i>	
Millbrook	8/5/89	P	143						<i>Bufo americanus</i>	
Millbrook	8/6/89	P	150						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/6/89	L	151	19	94	30			<i>Blarina brevicauda</i>	Dead in Trap
Millbrook	8/6/89	P	152	3	50	31			<i>Sorex cinereus</i>	
Millbrook	8/6/89	P	153						<i>Rana utricularia</i>	
Millbrook	8/6/89	P	154						<i>Bufo americanus</i>	
Millbrook	8/6/89	P	155						<i>Bufo americanus</i>	
Millbrook	8/6/89	P	156						<i>Bufo americanus</i>	
Millbrook	8/6/89	P	157						<i>Rana utricularia</i>	
Millbrook	8/6/89	L	/	18.5					<i>Peromyscus leucopus</i>	Released
Millbrook	8/7/89	P	170						<i>Rana palustris</i>	
Millbrook	8/8/89	P	171	26.5	82	130	F	Pg L	<i>Napaeozapus insignis</i>	
Millbrook	8/8/89	P	172	12	70	135	F	NR	<i>Napaeozapus insignis</i>	
Millbrook	8/8/89	P	173	12.5	66	130	F	NR	<i>Napaeozapus insignis</i>	
Millbrook	8/9/89	P	191						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/9/89	P	192	3.5	49	35			<i>Sorex cinereus</i>	
Millbrook	8/9/89	P	193	5	55	40			<i>Sorex cinereus</i>	
Millbrook	8/9/89	L	194	18.5	73	26			<i>Blarina brevicauda</i>	Dead in Trap
Millbrook	8/9/89	P	195						<i>Plethodon cinereus</i>	
Millbrook	8/10/89	P	199	5.5	56	42			<i>Sorex fumeus</i>	
Millbrook	8/10/89	P	200						<i>Plethodon cinereus</i>	
Millbrook	8/10/89	L	/	21.5			F	Pg L	<i>Peromyscus leucopus</i>	
Millbrook	8/11/89	P	205	17.5	85	80	M	NS	<i>Peromyscus leucopus</i>	

Appendix A

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Millbrook	8/11/89	P	206	17	81	127	M	S	<i>Napaeozapus insignis</i>	
Millbrook	8/11/89	P	207	8.5	68	40	M	S	<i>Sorex fumeus</i>	
Millbrook	8/11/89	P	208	4.5	58	38			<i>Sorex cinereus</i>	
Millbrook	8/11/89	P	209						<i>Plethodon glutinosus</i>	
Millbrook	8/11/89	P	210						<i>Rana utricularia</i>	
Millbrook	8/11/89	P	211						<i>Plethodon cinereus</i>	
Millbrook	8/11/89	P	212						<i>Rana utricularia</i>	
Millbrook	8/11/89	P	213						<i>Rana utricularia</i>	
Millbrook	8/11/89	P	214						<i>Rana utricularia</i>	
Millbrook	8/11/89	P	250						<i>Desmognathus fuscus fuscus</i>	Out of sequence
Millbrook	8/11/89	L	/	14	72	70	F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/8/89	P	176	34	90	85	F	Pg L	<i>Peromyscus leucopus</i>	
Roy Bridge	8/8/89	P	177	11	65	61	F	NR	<i>Peromyscus leucopus</i>	
Roy Bridge	8/8/89	P	178	17	73	70	M	S	<i>Peromyscus leucopus</i>	
Roy Bridge	8/8/89	P	179	27	91	75	M	S	<i>Peromyscus leucopus</i>	
Roy Bridge	8/8/89	P	180	3.5	48	39			<i>Sorex cinereus</i>	
Roy Bridge	8/8/89	P	181	3.5	50	33			<i>Sorex cinereus</i>	
Roy Bridge	8/8/89	P	182	50	127	42	M	S	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/8/89	P	183	55	120	46	M	S	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/8/89	P	184	3	51	37			<i>Sorex cinereus</i>	
Roy Bridge	8/8/89	P	185						<i>Eurycea bislineata bislineata</i>	
Roy Bridge	8/8/89	L	/	22	88	71	M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/9/89	P	186	4	52	36			<i>Sorex fumeus</i>	
Roy Bridge	8/9/89	L	/	39			F	NR	<i>Microtus pennsylvanicus</i>	Released
Roy Bridge	8/10/89	P	196	3	51	36			<i>Sorex cinereus</i>	
Roy Bridge	8/10/89	P	197	6	56	44			<i>Sorex cinereus</i>	
Roy Bridge	8/10/89	L	198	6	64	39			<i>Sorex fumeus</i>	Dead in Trap
Roy Bridge	8/11/89	P	218	45	115	44	F	Pg	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/11/89	P	219	37	100	37	M	S	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/11/89	P	220	4.5	60	34	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	221	5.5	60	40			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	222	4.5	56	35	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	L	223	5.5	63	40			<i>Sorex fumeus</i>	Dead in Trap
Roy Bridge	8/11/89	P	224	5	64	36			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	225	5.5	67	39			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	226	3.5	52	36			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	227	5.5	65	39			<i>Sorex cinereus</i>	
Roy Bridge	8/12/89	L	228	6.5	60	34	F	Pg L	<i>Sorex cinereus</i>	Dead in Trap
Roy Bridge	8/12/89	P	229	4.5	65	40			<i>Sorex fumeus</i>	
Roy Bridge	8/12/89	P	230	17.5	75	115	M	NS	<i>Zapus hudsonius</i>	
Roy Bridge	8/12/89	P	231	13	72	135	F	NR	<i>Napaeozapus insignis</i>	
Roy Bridge	8/12/89	P	232	46	105	78			<i>Condylura cristata</i>	
Roy Bridge	8/12/89	P	233	40	104	70			<i>Condylura cristata</i>	
Roy Bridge	8/12/89	P	234	11.5	70	60			<i>Peromyscus leucopus</i>	
Roy Bridge	8/12/89	L	235	17.5	95	25			<i>Blarina brevicauda</i>	Dead in Trap
Roy Bridge	8/12/89	P	236	2.5	45	36			<i>Sorex cinereus</i>	
Roy Bridge	8/12/89	P	237	18	90	27			<i>Blarina brevicauda</i>	
Roy Bridge	8/12/89	P	238	4.5	57	36			<i>Sorex cinereus</i>	
Roy Bridge	8/12/89	P	239	17	76	120	F	NR	<i>Zapus hudsonius</i>	
Roy Bridge	8/12/89	P	240	19.5	76	116	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/12/89	P	241	21	82	120	F	Pg L	<i>Zapus hudsonius</i>	
Roy Bridge	8/12/89	L	/	18			M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/13/89	P	254	13	81	24			<i>Blarina brevicauda</i>	
Roy Bridge	8/13/89	P	255	5.5	58	40			<i>Sorex cinereus</i>	
Roy Bridge	8/13/89	P	256	13.5	89	26			<i>Blarina brevicauda</i>	

Appendix A

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Roy Bridge	8/13/89	L	257	17	81	24	F	Pg L	<i>Blarina brevicauda</i>	Dead in Trap
Roy Bridge	8/13/89	P	258	4.5	52	39	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/13/89	P	259	5	60	41			<i>Sorex fumeus</i>	
Roy Bridge	8/13/89	P	260	7	65	40	M	S	<i>Sorex fumeus</i>	
Roy Bridge	8/13/89	P	261	3.5	54	35			<i>Sorex cinereus</i>	
Roy Bridge	8/13/89	P	262	5.5	59	43			<i>Sorex cinereus</i>	
Roy Bridge	8/13/89	P	263	4.5	61	42			<i>Sorex fumeus</i>	
Roy Bridge	8/13/89	P	264	19	95	26			<i>Blarina brevicauda</i>	
Roy Bridge	8/13/89	P	265	40	103	38	F	Pg L	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/13/89	L	/	18			M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/13/89	L	/	21			F	Pg L	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/14/89	L	266	13.5	92	22			<i>Blarina brevicauda</i>	Dead in Trap
Roy Bridge	8/14/89	P	267	5.5	65	42			<i>Sorex fumeus</i>	
Roy Bridge	8/14/89	P	268	5	51	37	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	269	2	40	25			<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	270	4	54	36	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	271	4	54	37			<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	272	6	62	34			<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	L	273	4	55	37	F	L	<i>Sorex cinereus</i>	Dead in Trap
Roy Bridge	8/15/89	P	274	17	86	25			<i>Blarina brevicauda</i>	
Roy Bridge	8/15/89	P	275	18	81	121	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/15/89	P	276	16.5	72	120	M	NS	<i>Zapus hudsonius</i>	
Roy Bridge	8/15/89	P	277	18	80	125	M	S	<i>Napaeozapus insignis</i>	
Roy Bridge	8/15/89	L	/	12			F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/15/89	L	/	19			F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/15/89	L	/	21			M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/16/89	P	278	17.5	84	122	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/16/89	P	279	14.5	90	22	F	L	<i>Blarina brevicauda</i>	
Roy Bridge	8/16/89	L	280	23	100	26			<i>Blarina brevicauda</i>	Dead in Trap
Roy Bridge	8/16/89	P	281	45	111	60			<i>Condylura cristata</i>	
Roy Bridge	8/16/89	P	282	7	70	41	F	L	<i>Sorex fumeus</i>	
Roy Bridge	8/16/89	P	283	23	80	121	F	L	<i>Zapus hudsonius</i>	
Roy Bridge	8/16/89	L	/	13			F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/16/89	L	/	28			M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/16/89	L	/	33			F	Pg L	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/17/89	P	284						<i>Rana clamitans melanota</i>	
Roy Bridge	8/17/89	P	285	19	96	26	F	L	<i>Blarina brevicauda</i>	
Roy Bridge	8/17/89	P	286	15	74	119	F	NR	<i>Zapus hudsonius</i>	
Roy Bridge	8/17/89	P	287	9.5	64	109	F	NR	<i>Zapus hudsonius</i>	
Roy Bridge	8/17/89	P	288	13		103	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/17/89	P	289	15		112	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/17/89	L	/	22			F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/17/89	L	/	24			M	NS	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/17/89	L	/	30			F	Pg L	<i>Peromyscus leucopus</i>	Released
Saw Mill	7/27/89	P	38	19	81	39	F		<i>Clethrionomus gapperi</i>	
Saw Mill	7/27/89	L	/	22	91	127	F	NR	<i>Napaeozapus insignis</i>	Released
Saw Mill	7/28/89	P	39	2.5	41	29			<i>Sorex cinereus</i>	
Saw Mill	7/29/89	L	/	12	71	24			<i>Blarina brevicauda</i>	Released
Saw Mill	7/29/89	L	/	26			M	S	<i>Clethrionomus gapperi</i>	Released
Saw Mill	7/29/89	L	/	21			F	NR	<i>Napaeozapus insignis</i>	Released
Saw Mill	7/30/89			No Captures						
Saw Mill	7/31/89	P	44	15	84	24			<i>Blarina brevicauda</i>	
Saw Mill	7/31/89	P	45	4.5	51	37			<i>Sorex cinereus</i>	
Saw Mill	7/31/89	L	46	5.5	60	40			<i>Sorex fumeus</i>	Dead in Trap
Saw Mill	7/31/89	P	47	9.5	65	63	F	NR	<i>Peromyscus leucopus</i>	

Appendix A

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Saw Mill	7/31/89	P	48						Land Snail	
Saw Mill	8/1/89	P	55	25	105	40	M	NS	<i>Microtus pennsylvanicus</i>	
Saw Mill	8/1/89	L	56	3	53	39			<i>Sorex cinereus</i>	Dead in Trap
Saw Mill	8/1/89	L	57	13.5	75	27			<i>Blarina brevicauda</i>	Dead in Trap
Saw Mill	8/1/89	P	58	19	72	125	F		<i>Zapus hudsonius</i>	
Saw Mill	8/1/89	P	59	16	72	107	M	S	<i>Zapus hudsonius</i>	
Saw Mill	8/1/89	P	60	15.5	76	121	M	S	<i>Zapus hudsonius</i>	
Saw Mill	8/1/89	P	61	6	65	41			<i>Sorex fumeus</i>	
Saw Mill	8/1/89	L	62	5.5	64	43			<i>Sorex fumeus</i>	Dead in Trap
Saw Mill	8/1/89	P	63						<i>Ambystoma opacum</i>	
Saw Mill	8/2/89			No Captures						
Saw Mill	8/3/89	L	116	5.5	55	40			<i>Sorex cinereus</i>	Dead in Trap
Saw Mill	8/3/89	P	117	5.5	58	42			<i>Sorex cinereus</i>	
Saw Mill	8/3/89	P	118						<i>Bufo woodhousei</i>	
Saw Mill	8/3/89	P	116A						<i>Desmognathus fuscus fuscus</i>	
Saw Mill	8/4/89	L	/	12	73 *	28			<i>Blarina brevicauda</i>	Released
Saw Mill	8/5/89	P	128	5	58	43			<i>Sorex fumeus</i>	
Saw Mill	8/5/89	P	129	8.5	74	40			<i>Sorex fumeus</i>	
Saw Mill	8/5/89	P	130	2	50	30			<i>Sorex cinereus</i>	
Saw Mill	8/5/89	P	131	38	105	71			<i>Condylura cristata</i>	
Saw Mill	8/5/89	P	132						<i>Plethodon cinereus</i>	
Steam Mill Tr.	7/29/89			No Captures						Coon hit traps
Steam Mill Tr.	7/30/89	L	/	17.5	88	78	M	S	<i>Peromyscus leucopus</i>	Released
Steam Mill Tr.	7/31/89	L	49	6	55	41			<i>Sorex fumeus</i>	Dead in Trap
Steam Mill Tr.	7/31/89	L	50	21	81	23	F	Pg/L	<i>Blarina brevicauda</i>	Dead in Trap
Steam Mill Tr.	7/31/89	P	51	6.5	60	45			<i>Sorex fumeus</i>	
Steam Mill Tr.	7/31/89	P	52	15.5	85	81			<i>Peromyscus leucopus</i>	
Steam Mill Tr.	8/1/89	P	76	5.5	58	38			<i>Sorex cinereus</i>	
Steam Mill Tr.	8/1/89	P	77	6.5	62	44			<i>Sorex cinereus</i>	
Steam Mill Tr.	8/1/89	L	78	5	58	40			<i>Sorex cinereus</i>	Dead in Trap
Steam Mill Tr.	8/1/89	P	79						<i>Pseudotriton ruber ruber</i>	
Steam Mill Tr.	8/2/89	P	87						<i>Rana catesbeiana</i>	
Steam Mill Tr.	8/2/89	P	88						<i>Rana utricularia</i>	
Steam Mill Tr.	8/3/89	P	106	4.5	60	42			<i>Sorex cinereus</i>	
Steam Mill Tr.	8/3/89	P	107	3.5	52	31			<i>Sorex cinereus</i>	
Steam Mill Tr.	8/4/89	P	122						<i>Pseudotriton ruber ruber</i>	
Steam Mill Tr.	8/4/89	L	/	17	89	22			<i>Blarina brevicauda</i>	Released
Steam Mill Tr.	8/4/89	L	/	16.5			M	NR	<i>Peromyscus leucopus</i>	Released
Steam Mill Tr.	8/5/89	P	123	21	89	34	F	L	<i>Clethrionomys gapperi</i>	
Steam Mill Tr.	8/5/89	P	124	18	96	25	F	L	<i>Blarina brevicauda</i>	
Steam Mill Tr.	8/6/89	P	144						<i>Rana utricularia</i>	
Steam Mill Tr.	8/6/89	P	145	5	61	47			<i>Sorex fumeus</i>	
Steam Mill Tr.	8/6/89	P	146	18	94	27			<i>Blarina brevicauda</i>	
Steam Mill Tr.	8/6/89	P	147	19.5	80	115	M	S	<i>Zapus hudsonius</i>	
Steam Mill Tr.	8/6/89	P	148						<i>Desmognathus fuscus fuscus</i>	
Steam Mill Tr.	8/6/89	P	149	2	45	29			<i>Sorex hovi</i>	
Steam Mill Tr.	8/6/89	L	/	23	90	32	F	Pg L	<i>Clethrionomys gapperi</i>	Released
Steam Mill Tr.	8/6/89	L	/	16.5	80	73	M	NR	<i>Peromyscus leucopus</i>	Released
Steam Mill Tr.	8/7/89	P	168	18.5	82	72	M	S	<i>Peromyscus leucopus</i>	
Steam Mill Tr.	8/7/89	L	169	14.5	82	24			<i>Blarina brevicauda</i>	Dead in Trap
Steenv Kill	7/26/89	P	35	4	56	38			<i>Sorex cinereus</i>	
Steenv Kill	7/26/89	P	36	5	58	40			<i>Sorex cinereus</i>	
Steenv Kill	7/27/89	L	37	6	60	42			<i>Sorex fumeus</i>	Dead in Trap
Steenv Kill	7/28/89			No Captures						
Steenv Kill	7/29/89	L	/	13	77	22			<i>Blarina brevicauda</i>	Released

Appendix A

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Steeny Kill	7/30/89	P	40	14.5	69	25			<i>Blarina brevicauda</i>	
Steeny Kill	7/30/89	L	/	15					<i>Blarina brevicauda</i>	Released
Steeny Kill	7/31/89	P	41	24	87	81	M	S	<i>Peromyscus leucopus</i>	
Steeny Kill	8/1/89	P	64	19.5	96	25			<i>Blarina brevicauda</i>	
Steeny Kill	8/1/89	P	65	16.5	81	24			<i>Blarina brevicauda</i>	
Steeny Kill	8/1/89	P	66	6	62	43			<i>Sorex fumeus</i>	
Steeny Kill	8/1/89	P	67	5.5	63	41			<i>Sorex fumeus</i>	
Steeny Kill	8/1/89	P	68	2	52	30			<i>Sorex cinereus</i>	
Steeny Kill	8/1/89	P	69	5.5	63	42			<i>Sorex fumeus</i>	
Steeny Kill	8/1/89	L	70	6	65	46			<i>Sorex fumeus</i>	Dead in Trap
Steeny Kill	8/1/89	P	71	5.5	63	39			<i>Sorex cinereus</i>	
Steeny Kill	8/1/89	L	72	5.5	65	43			<i>Sorex fumeus</i>	Dead in Trap
Steeny Kill	8/1/89	L	73	4.5	65	50			<i>Sorex dispar</i>	Dead in Trap
Steeny Kill	8/1/89	P	74						<i>Pseudotriton ruber ruber</i>	
Steeny Kill	8/1/89	P	75						<i>Pseudotriton ruber ruber</i>	
Steeny Kill	8/2/89	P	86						<i>Plethodon cinereus</i>	
Steeny Kill	8/3/89	P	113	6	62	42			<i>Sorex fumeus</i>	
Steeny Kill	8/3/89	P	114	5	60	38			<i>Sorex cinereus</i>	
Steeny Kill	8/3/89	P	115	2.5	44	26			<i>Sorex hovi</i>	
Steeny Kill	8/4/89	L	/	17	80	22	M	S	<i>Blarina brevicauda</i>	Released
Steeny Kill	8/4/89	L	/	23	83	89	M	S	<i>Peromyscus leucopus</i>	Released
Wapalanne	7/17/89			No Captures						
Wapalanne	7/18/89	P	1	5.25	54	41			<i>Sorex cinereus</i>	
Wapalanne	7/18/89	P	2	5	52	40			<i>Sorex cinereus</i>	
Wapalanne	7/18/89	P	3	8	66	39			<i>Sorex fumeus</i>	
Wapalanne	7/18/89	P	4	7	50				<i>Sorex fumeus</i>	Tail cut
Wapalanne	7/18/89	P	5	14	75	25			<i>Blarina brevicauda</i>	
Wapalanne	7/19/89	P	6	5	43	36			<i>Sorex cinereus</i>	
Wapalanne	7/20/89	L	7	11.5	70	20			<i>Blarina brevicauda</i>	Dead in Trap
Wapalanne	7/20/89	P	8	13.5	70	125	M	NS	<i>Napaecyzapus insignis</i>	
Wapalanne	7/20/89	L	9	27	95	86	M	S	<i>Peromyscus leucopus</i>	Dead in Trap
Wapalanne	7/20/89	P	10						<i>Plethodon glutinosus</i>	
Wapalanne	7/20/89	P	11						<i>Desmognathus fuscus fuscus</i>	
Wapalanne	7/21/89	L	12	12	83	24			<i>Blarina brevicauda</i>	Dead in Trap
Wapalanne	7/21/89	L	13	16	91	26			<i>Blarina brevicauda</i>	Dead in Trap
Wapalanne	7/21/89	P	14	5.5	60	38			<i>Sorex fumeus</i>	
Wapalanne	7/21/89	P	15	5.5	61	38			<i>Sorex cinereus</i>	
Wapalanne	7/21/89	P	16	6	65	45			<i>Sorex fumeus</i>	
Wapalanne	7/21/89	P	17	6	51	40			<i>Sorex cinereus</i>	
Wapalanne	7/21/89	P	18	6	55	46			<i>Sorex fumeus</i>	
Wapalanne	7/22/89	P	19	15	75	25			<i>Blarina brevicauda</i>	
Wapalanne	7/22/89	P	20						<i>Hemidactylium scutatum</i>	
Wapalanne	7/22/89	P	21						<i>Plethodon cinereus</i>	
Wapalanne	7/22/89	P	22						<i>Desmognathus fuscus fuscus</i>	
Wapalanne	7/22/89	L	/	14	73	22			<i>Blarina brevicauda</i>	Released
Wapalanne	7/23/89	P	23	5.5	56	46			<i>Sorex fumeus</i>	
Wapalanne	7/23/89	L	24	17	85	23			<i>Blarina brevicauda</i>	Dead in Trap
Wapalanne	7/23/89	P	25	6	59	40			<i>Sorex fumeus</i>	
Wapalanne	7/23/89	P	26						<i>Desmognathus fuscus fuscus</i>	
Wapalanne	7/23/89	P	27						<i>Plethodon cinereus</i>	
Wapalanne	7/23/89	P	28						<i>Plethodon cinereus</i>	
Wapalanne	7/24/89	P	29	11.5	70	26			<i>Blarina brevicauda</i>	
Wapalanne	7/24/89	P	30						<i>Notophthalmus viridescens</i>	
Wapalanne	7/24/89	P	31						<i>Rana sylvatica</i>	
Wapalanne	7/25/89	P	32	30	82	121	F	Pg/L	<i>Zapus hudsonius</i>	

Appendix A

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Wapalanne	7/25/89			No Captures						
Wapalanne	7/26/89	L	33	20	90	35	M	S	<i>Clethrionomys gapperi</i>	Sacrificed
Wapalanne	7/26/89	P	34						<i>Plethodon glutinosus</i>	
Wapalanne	7/27/89			No Captures						
Yards Creek	8/15/89			No Captures						
Yards Creek	8/16/89			No Captures						
Yards Creek	8/17/89			No Captures						
Yards Creek	8/18/89			No Captures						
Yards Creek	8/19/89	L	/	23.5			F	L	<i>Peromyscus leucopus</i>	Released
Yards Creek	8/20/89	S	294	30.5	104	36	M	S	<i>Clethrionomys gapperi</i>	
Yards Creek	8/20/89	S	295	18	78	80	F	L	<i>Peromyscus leucopus</i>	
Yards Creek	8/20/89	L	/	21.5			M	S	<i>Peromyscus leucopus</i>	Released
Yards Creek	8/21/89	S	297	20.5	85	135	M	S	<i>Napaeozapus insignis</i>	
Yards Creek	8/21/89	L	/	17			F	L	<i>Blarina brevicauda</i>	Released
Yards Creek	8/21/89	L	/	42			M	S	<i>Microtus pennsylvanicus</i>	Released
Yards Creek	8/22/89	L	/	33			F	NR	<i>Microtus pennsylvanicus</i>	Released
Yards Creek	8/23/89	L	/	38			M	S	<i>Microtus pennsylvanicus</i>	Released
Yards Creek	8/23/89	L	/	21			F	L	<i>Peromyscus leucopus</i>	Released
Yards Creek	8/24/89	L	/	40			M	S	<i>Microtus pennsylvanicus</i>	Released

Appendix B

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Saw Mill	8/1/89	P	63						<i>Ambystoma opacum</i>	
Cedar Bog	7/31/89	L	42	12.5	84	21			<i>Blarina brevicauda</i>	Dead in Trap
Cedar Bog	7/31/89	L	/	15	79	22			<i>Blarina brevicauda</i>	Released
Cedar Bog	7/31/89	L	/	18	85	23	F	Pg/L	<i>Blarina brevicauda</i>	Released
Cedar Bog	8/1/89	L	54	16	79	25			<i>Blarina brevicauda</i>	Dead in Trap
Cedar Bog	8/2/89	L	/	19.5	99	24			<i>Blarina brevicauda</i>	Released
Cedar Bog	8/3/89	L	111	19.5	98	27			<i>Blarina brevicauda</i>	Dead in Trap
Cedar Bog	8/3/89	L	/	18.5	98	23			<i>Blarina brevicauda</i>	Released
Cedar Bog	8/4/89	L	/	14					<i>Blarina brevicauda</i>	Released
Cedar Bog	8/4/89	L	/	19			F	L	<i>Blarina brevicauda</i>	Released
Cedar Bog	8/5/89	L	136	12.5	85	25			<i>Blarina brevicauda</i>	Dead in Trap
Cedar Bog	8/5/89	L	/	12.5					<i>Blarina brevicauda</i>	Released
Cedar Bog	8/5/89	L	/	19					<i>Blarina brevicauda</i>	Released
Frank	8/5/89	L	126	21.5	94	22	F	L	<i>Blarina brevicauda</i>	Dead in Trap
Frank	8/10/89	L	/	12.5	80	23			<i>Blarina brevicauda</i>	Released
Frank	8/12/89	P	244	15	90	24			<i>Blarina brevicauda</i>	
Frank	8/12/89	L	247	13	78	25			<i>Blarina brevicauda</i>	Dead in Trap
Frank	8/12/89	L	248	16	89	26			<i>Blarina brevicauda</i>	Dead in Trap
Ice Cave	8/24/89	L	300	14	74	26			<i>Blarina brevicauda</i>	Dead in Trap
Millbrook	8/3/89	P	102	19	100	22			<i>Blarina brevicauda</i>	
Millbrook	8/3/89	L	/	17.5	93	22			<i>Blarina brevicauda</i>	Released
Millbrook	8/5/89	P	135	16	91	22			<i>Blarina brevicauda</i>	
Millbrook	8/6/89	L	151	19	94	30			<i>Blarina brevicauda</i>	Dead in Trap
Millbrook	8/9/89	L	194	18.5	73	26			<i>Blarina brevicauda</i>	Dead in Trap
Rov Bridge	8/12/89	L	235	17.5	95	25			<i>Blarina brevicauda</i>	Dead in Trap
Rov Bridge	8/12/89	P	237	18	90	27			<i>Blarina brevicauda</i>	
Rov Bridge	8/13/89	P	254	13	81	24			<i>Blarina brevicauda</i>	
Rov Bridge	8/13/89	P	256	13.5	89	26			<i>Blarina brevicauda</i>	
Rov Bridge	8/13/89	L	257	17	81	24	F	Pg L	<i>Blarina brevicauda</i>	Dead in Trap
Rov Bridge	8/13/89	P	264	19	95	26			<i>Blarina brevicauda</i>	
Rov Bridge	8/14/89	L	266	13.5	92	22			<i>Blarina brevicauda</i>	Dead in Trap
Rov Bridge	8/15/89	P	274	17	86	25			<i>Blarina brevicauda</i>	
Rov Bridge	8/16/89	P	279	14.5	90	22	F	L	<i>Blarina brevicauda</i>	
Rov Bridge	8/16/89	L	280	23	100	26			<i>Blarina brevicauda</i>	Dead in Trap
Rov Bridge	8/17/89	P	285	19	96	26	F	L	<i>Blarina brevicauda</i>	
Saw Mill	7/29/89	L	/	12	71	24			<i>Blarina brevicauda</i>	Released
Saw Mill	7/31/89	P	44	15	84	24			<i>Blarina brevicauda</i>	
Saw Mill	8/1/89	L	57	13.5	75	27			<i>Blarina brevicauda</i>	Dead in Trap
Saw Mill	8/4/89	L	/	12	73	28			<i>Blarina brevicauda</i>	Released
Steam Mill Tr.	7/31/89	L	50	21	81	23	F	Pg/L	<i>Blarina brevicauda</i>	Dead in Trap
Steam Mill Tr.	8/4/89	L	/	17	89	22			<i>Blarina brevicauda</i>	Released
Steam Mill Tr.	8/5/89	P	124	18	96	25	F	L	<i>Blarina brevicauda</i>	
Steam Mill Tr.	8/6/89	P	146	18	94	27			<i>Blarina brevicauda</i>	
Steam Mill Tr.	8/7/89	L	169	14.5	82	24			<i>Blarina brevicauda</i>	Dead in Trap
Steeny Kill	7/29/89	L	/	13	77	22			<i>Blarina brevicauda</i>	Released
Steeny Kill	7/30/89	P	40	14.5	69	25			<i>Blarina brevicauda</i>	
Steeny Kill	7/30/89	L	/	15					<i>Blarina brevicauda</i>	Released
Steeny Kill	8/1/89	P	64	19.5	96	25			<i>Blarina brevicauda</i>	
Steeny Kill	8/1/89	P	65	16.5	81	24			<i>Blarina brevicauda</i>	
Steeny Kill	8/4/89	L	/	17	80	22	M	S	<i>Blarina brevicauda</i>	Released
Wapalanne	7/18/89	P	5	14	75	25			<i>Blarina brevicauda</i>	
Wapalanne	7/20/89	L	7	11.5	70	20			<i>Blarina brevicauda</i>	Dead in Trap
Wapalanne	7/21/89	L	12	12	83	24			<i>Blarina brevicauda</i>	Dead in Trap
Wapalanne	7/21/89	L	13	16	91	26			<i>Blarina brevicauda</i>	Dead in Trap
Wapalanne	7/22/89	P	19	15	75	25			<i>Blarina brevicauda</i>	

Appendix B

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Wapalanne	7/22/89	L	/	14	73	22			<i>Blarina brevicauda</i>	Released
Wapalanne	7/23/89	L	24	17	85	23			<i>Blarina brevicauda</i>	Dead in Trap
Wapalanne	7/24/89	P	29	11.5	70	26			<i>Blarina brevicauda</i>	
Yards Creek	8/21/89	L	/	17			F	L	<i>Blarina brevicauda</i>	Released
Frank	8/12/89	P	249						<i>Bufo americanus</i>	
Millbrook	8/3/89	P	93						<i>Bufo americanus</i>	
Millbrook	8/3/89	P	94						<i>Bufo americanus</i>	
Millbrook	8/3/89	P	95						<i>Bufo americanus</i>	
Millbrook	8/5/89	P	139						<i>Bufo americanus</i>	
Millbrook	8/5/89	P	141						<i>Bufo americanus</i>	
Millbrook	8/5/89	P	142						<i>Bufo americanus</i>	
Millbrook	8/5/89	P	143						<i>Bufo americanus</i>	
Millbrook	8/6/89	P	154						<i>Bufo americanus</i>	
Millbrook	8/6/89	P	155						<i>Bufo americanus</i>	
Millbrook	8/6/89	P	156						<i>Bufo americanus</i>	
Saw Mill	8/3/89	P	118						<i>Bufo woodhousei</i>	
Cedar Bog	8/1/89	L	/	22	94	41	F	L	<i>Clethrionomys gapperi</i>	Released
Cedar Bog	8/2/89	L	/	23	93	41	F	L	<i>Clethrionomys gapperi</i>	Released
Saw Mill	7/27/89	P	38	19	81	39	F		<i>Clethrionomys gapperi</i>	
Saw Mill	7/29/89	L	/	26			M	S	<i>Clethrionomys gapperi</i>	Released
Steam Mill Tr.	8/5/89	P	123	21	89	34	F	L	<i>Clethrionomys gapperi</i>	
Steam Mill Tr.	8/6/89	L	/	23	90	32	F	Pg L	<i>Clethrionomys gapperi</i>	Released
Wapalanne	7/26/89	L	33	20	90	35	M	S	<i>Clethrionomys gapperi</i>	Sacrificed
Yards Creek	8/20/89	S	294	30.5	104	36	M	S	<i>Clethrionomys gapperi</i>	
Roy Bridge	8/12/89	P	232	46	105	78			<i>Condylura cristata</i>	
Roy Bridge	8/12/89	P	233	40	104	70			<i>Condylura cristata</i>	
Roy Bridge	8/16/89	P	281	45	111	60			<i>Condylura cristata</i>	
Saw Mill	8/5/89	P	131	38	105	71			<i>Condylura cristata</i>	
Millbrook	8/3/89	P	92						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/5/89	P	133						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/6/89	P	150						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/9/89	P	191						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/11/89	P	250						<i>Desmognathus fuscus fuscus</i>	Out of sequence
Saw Mill	8/3/89	P	116A						<i>Desmognathus fuscus fuscus</i>	
Steam Mill Tr.	8/6/89	P	148						<i>Desmognathus fuscus fuscus</i>	
Wapalanne	7/20/89	P	11						<i>Desmognathus fuscus fuscus</i>	
Wapalanne	7/22/89	P	22						<i>Desmognathus fuscus fuscus</i>	
Wapalanne	7/23/89	P	26						<i>Desmognathus fuscus fuscus</i>	
Millbrook	8/2/89	P	85						<i>Eurycea bislineata bislineata</i>	
Roy Bridge	8/8/89	P	185						<i>Eurycea bislineata bislineata</i>	
Wapalanne	7/22/89	P	20						<i>Hemidactylium scutatum</i>	
Saw Mill	7/31/89	P	48						Land Snail	
Cedar Bog	8/3/89	L	112	49.5	111	40	M	S	<i>Microtus pennsylvanicus</i>	Dead in Trap
Frank	8/3/89	L	/	48			F	L	<i>Microtus pennsylvanicus</i>	Released
Frank	8/4/89	P	119	43	107	38	M	S	<i>Microtus pennsylvanicus</i>	
Frank	8/5/89	P	125	31	115	45	M	S	<i>Microtus pennsylvanicus</i>	
Frank	8/10/89	P	204	44.5	110	38	F	L	<i>Microtus pennsylvanicus</i>	
Frank	8/11/89	P	215	40.5	100	45	F	NR	<i>Microtus pennsylvanicus</i>	
Frank	8/11/89	P	216	35	101	43	M	S	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/8/89	P	182	50	127	42	M	S	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/8/89	P	183	55	120	46	M	S	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/9/89	L	/	39			F	NR	<i>Microtus pennsylvanicus</i>	Released
Roy Bridge	8/11/89	P	218	45	115	44	F	Pg	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/11/89	P	219	37	100	37	M	S	<i>Microtus pennsylvanicus</i>	
Roy Bridge	8/13/89	P	265	40	103	38	F	Pg L	<i>Microtus pennsylvanicus</i>	

Appendix B

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Saw Mill	8/1/89	P	55	25	105	40	M	NS	<i>Microtus pennsylvanicus</i>	
Yards Creek	8/21/89	L	/	42			M	S	<i>Microtus pennsylvanicus</i>	Released
Yards Creek	8/22/89	L	/	33			F	NR	<i>Microtus pennsylvanicus</i>	Released
Yards Creek	8/23/89	L	/	38			M	S	<i>Microtus pennsylvanicus</i>	Released
Yards Creek	8/24/89	L	/	40			M	S	<i>Microtus pennsylvanicus</i>	Released
Frank	8/12/89	P	251	14.5	73	124	F	NR	<i>Napaeozapus insignis</i>	
Millbrook	8/2/89	P	81	21	85	132	M	S	<i>Napaeozapus insignis</i>	
Millbrook	8/4/89	P	120	12	68	133			<i>Napaeozapus insignis</i>	
Millbrook	8/5/89	P	134	11.5	70	130	F	NR	<i>Napaeozapus insignis</i>	
Millbrook	8/8/89	P	171	26.5	82	130	F	Pg L	<i>Napaeozapus insignis</i>	
Millbrook	8/8/89	P	172	12	70	135	F	NR	<i>Napaeozapus insignis</i>	
Millbrook	8/8/89	P	173	12.5	66	130	F	NR	<i>Napaeozapus insignis</i>	
Millbrook	8/11/89	P	206	17	81	127	M	S	<i>Napaeozapus insignis</i>	
Roy Bridge	8/12/89	P	231	13	72	135	F	NR	<i>Napaeozapus insignis</i>	
Roy Bridge	8/15/89	P	277	18	80	125	M	S	<i>Napaeozapus insignis</i>	
Saw Mill	7/27/89	L	/	22	91	127	F	NR	<i>Napaeozapus insignis</i>	Released
Saw Mill	7/29/89	L	/	21			F	NR	<i>Napaeozapus insignis</i>	Released
Wapalanne	7/20/89	P	8	13.5	70	125	M	NS	<i>Napaeozapus insignis</i>	
Yards Creek	8/21/89	S	297	20.5	85	135	M	S	<i>Napaeozapus insignis</i>	
Frank	8/6/89	P	159						<i>Notophthalmus viridescens</i>	
Millbrook	8/3/89	P	91						<i>Notophthalmus viridescens</i>	
Wapalanne	7/24/89	P	30						<i>Notophthalmus viridescens</i>	
Cedar Bog	8/2/89	L	/	22	88	71	M	NS	<i>Peromyscus leucopus</i>	Released
Cedar Bog	8/2/89	L	/	25	98	79	F	NR	<i>Peromyscus leucopus</i>	Released
Cedar Bog	8/2/89	L	/	28			M	S	<i>Peromyscus leucopus</i>	Released
Cedar Bog	8/3/89	L	/	23	85	70	M	S	<i>Peromyscus leucopus</i>	Released
Cedar Bog	8/4/89	L	/	12			M	NS	<i>Peromyscus leucopus</i>	Released
Cedar Bog	8/4/89	L	/	30			F	Pg L	<i>Peromyscus leucopus</i>	Released
Cedar Bog	8/5/89	L	/	24			F	NR	<i>Peromyscus leucopus</i>	Released
Cedar Bog	8/6/89	L	/	33			F	Pg L	<i>Peromyscus leucopus</i>	Released
Frank	8/5/89	P	127	11	75	65	F	NR	<i>Peromyscus leucopus</i>	
Frank	8/9/89	P	190	15.5	72	76	F	NR	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	S	290	30	85	92	M	S	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	S	291	37	92	80	F	Pg L	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	S	292	21.5	82	80	M	S	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	S	293	33	86	76	F	Pg L	<i>Peromyscus leucopus</i>	
Ice Cave	8/19/89	L	/	16			F	NR	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/19/89	L	/	28			M	S	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/20/89	S	296	11	61	56	M	NS	<i>Peromyscus leucopus</i>	
Ice Cave	8/20/89	L	/	12			F	NR	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/20/89	L	/	27			F	Pg L	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/22/89	S	298	22.5	88	69	M	S	<i>Peromyscus leucopus</i>	
Ice Cave	8/22/89	S	299	16.5	78	65	M	S	<i>Peromyscus leucopus</i>	Juven. Pelage
Ice Cave	8/23/89	L	/	19.5			F	NR	<i>Peromyscus leucopus</i>	Released
Ice Cave	8/26/89	L	/	20.5			F	Pg L	<i>Peromyscus leucopus</i>	Released
Millbrook	8/2/89	P	83	21	85	73	M	S	<i>Peromyscus leucopus</i>	
Millbrook	8/2/89	L	/	19.5	80	71	M	S	<i>Peromyscus leucopus</i>	Released
Millbrook	8/3/89	L	/	17.5			M	S	<i>Peromyscus leucopus</i>	Released
Millbrook	8/3/89	L	/	20	84	74	F	L	<i>Peromyscus leucopus</i>	Released
Millbrook	8/6/89	L	/	18.5					<i>Peromyscus leucopus</i>	Released
Millbrook	8/10/89	L	/	21.5			F	Pg L	<i>Peromyscus leucopus</i>	
Millbrook	8/11/89	P	205	17.5	85	80	M	NS	<i>Peromyscus leucopus</i>	
Millbrook	8/11/89	L	/	14	72	70	F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/8/89	P	176	34	90	85	F	Pg L	<i>Peromyscus leucopus</i>	
Roy Bridge	8/8/89	P	177	11	65	61	F	NR	<i>Peromyscus leucopus</i>	

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Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Roy Bridge	8/8/89	P	178	17	73	70	M	S	<i>Peromyscus leucopus</i>	
Roy Bridge	8/8/89	P	179	27	91	75	M	S	<i>Peromyscus leucopus</i>	
Roy Bridge	8/8/89	L	/	22	88	71	M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/12/89	P	234	11.5	70	60			<i>Peromyscus leucopus</i>	
Roy Bridge	8/12/89	L	/	18			M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/13/89	L	/	18			M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/13/89	L	/	21			F	Pg L	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/15/89	L	/	12			F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/15/89	L	/	19			F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/15/89	L	/	21			M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/16/89	L	/	13			F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/16/89	L	/	28			M	S	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/16/89	L	/	33			F	Pg L	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/17/89	L	/	22			F	NR	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/17/89	L	/	24			M	NS	<i>Peromyscus leucopus</i>	Released
Roy Bridge	8/17/89	L	/	30			F	Pg L	<i>Peromyscus leucopus</i>	Released
Saw Mill	7/31/89	P	47	9.5	65	63	F	NR	<i>Peromyscus leucopus</i>	
Steam Mill Tr.	7/30/89	L	/	17.5	88	78	M	S	<i>Peromyscus leucopus</i>	Released
Steam Mill Tr.	7/31/89	P	52	15.5	85	81			<i>Peromyscus leucopus</i>	
Steam Mill Tr.	8/4/89	L	/	16.5			M	NR	<i>Peromyscus leucopus</i>	Released
Steam Mill Tr.	8/6/89	L	/	16.5	80	73	M	NR	<i>Peromyscus leucopus</i>	Released
Steam Mill Tr.	8/7/89	P	168	18.5	82	72	M	S	<i>Peromyscus leucopus</i>	
Steeny Kill	7/31/89	P	41	24	87	81	M	S	<i>Peromyscus leucopus</i>	
Steeny Kill	8/4/89	L	/	23	83	89	M	S	<i>Peromyscus leucopus</i>	Released
Wapalanne	7/20/89	L	9	27	95	86	M	S	<i>Peromyscus leucopus</i>	Dead in Trap
Yards Creek	8/19/89	L	/	23.5			F	L	<i>Peromyscus leucopus</i>	Released
Yards Creek	8/20/89	S	295	18	78	80	F	L	<i>Peromyscus leucopus</i>	
Yards Creek	8/20/89	L	/	21.5			M	S	<i>Peromyscus leucopus</i>	Released
Yards Creek	8/23/89	L	/	21			F	L	<i>Peromyscus leucopus</i>	Released
Millbrook	8/9/89	P	195						<i>Plethodon cinereus</i>	
Millbrook	8/10/89	P	200						<i>Plethodon cinereus</i>	
Millbrook	8/11/89	P	211						<i>Plethodon cinereus</i>	
Saw Mill	8/5/89	P	132						<i>Plethodon cinereus</i>	
Steeny Kill	8/2/89	P	86						<i>Plethodon cinereus</i>	
Wapalanne	7/22/89	P	21						<i>Plethodon cinereus</i>	
Wapalanne	7/23/89	P	27						<i>Plethodon cinereus</i>	
Wapalanne	7/23/89	P	28						<i>Plethodon cinereus</i>	
Millbrook	8/11/89	P	209						<i>Plethodon glutinosus</i>	
Wapalanne	7/20/89	P	10						<i>Plethodon glutinosus</i>	
Wapalanne	7/26/89	P	34						<i>Plethodon glutinosus</i>	
Steam Mill Tr.	8/1/89	P	79						<i>Pseudotriton ruber ruber</i>	
Steam Mill Tr.	8/4/89	P	122						<i>Pseudotriton ruber ruber</i>	
Steeny Kill	8/1/89	P	74						<i>Pseudotriton ruber ruber</i>	
Steeny Kill	8/1/89	P	75						<i>Pseudotriton ruber ruber</i>	
Millbrook	8/3/89	P	90						<i>Rana catesbeiana</i>	
Steam Mill Tr.	8/2/89	P	87						<i>Rana catesbeiana</i>	
Roy Bridge	8/17/89	P	284						<i>Rana clamitans melanota</i>	
Millbrook	8/7/89	P	170						<i>Rana palustris</i>	
Wapalanne	7/24/89	P	31						<i>Rana sylvatica</i>	
Frank	8/6/89	P	158						<i>Rana utricularia</i>	
Millbrook	8/2/89	P	84						<i>Rana utricularia</i>	
Millbrook	8/3/89	P	89						<i>Rana utricularia</i>	
Millbrook	8/3/89	P	96						<i>Rana utricularia</i>	
Millbrook	8/3/89	P	97						<i>Rana utricularia</i>	
Millbrook	8/5/89	P	140						<i>Rana utricularia</i>	

Appendix B

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Millbrook	8/6/89	P	153						<i>Rana utricularia</i>	
Millbrook	8/6/89	P	157						<i>Rana utricularia</i>	
Millbrook	8/11/89	P	210						<i>Rana utricularia</i>	
Millbrook	8/11/89	P	212						<i>Rana utricularia</i>	
Millbrook	8/11/89	P	213						<i>Rana utricularia</i>	
Millbrook	8/11/89	P	214						<i>Rana utricularia</i>	
Steam Mill Tr.	8/2/89	P	88						<i>Rana utricularia</i>	
Steam Mill Tr.	8/6/89	P	144						<i>Rana utricularia</i>	
Cedar Bog	7/31/89	L	43	4.5	51	43			<i>Sorex cinereus</i>	Dead in Trap
Cedar Bog	8/2/89	L	/	6	65	38			<i>Sorex cinereus</i>	Released
Cedar Bog	8/3/89	L	/	5	60	44	F	L	<i>Sorex cinereus</i>	Released
Cedar Bog	8/5/89	L	137	4	55	41			<i>Sorex cinereus</i>	Dead in Trap
Cedar Bog	8/5/89	L	138	2.5	50	41			<i>Sorex cinereus</i>	Dead in Trap
Cedar Bog	8/5/89	L	/	5.5					<i>Sorex cinereus</i>	Released
Cedar Bog	8/5/89	L	/	6					<i>Sorex cinereus</i>	Released
Cedar Bog	8/6/89	L	161	3.5	58	37			<i>Sorex cinereus</i>	Dead in Trap
Cedar Bog	8/6/89	L	162	4.5	61	37	M	S	<i>Sorex cinereus</i>	Dead in Trap
Cedar Bog	8/6/89	L	/	5	63	38			<i>Sorex cinereus</i>	Released
Cedar Bog	8/6/89	L	/	5.5	65	36			<i>Sorex cinereus</i>	Released
Frank	8/6/89	L	160	3.5	60	36	F	L	<i>Sorex cinereus</i>	Dead in Trap
Frank	8/7/89	P	164	4	57	38	M	S	<i>Sorex cinereus</i>	Penis visible
Frank	8/7/89	P	166	3.5	50	33			<i>Sorex cinereus</i>	
Frank	8/7/89	P	167	6.5	64	39	F	L	<i>Sorex cinereus</i>	
Frank	8/8/89	P	174	4	55	36	M	S	<i>Sorex cinereus</i>	Penis visible
Frank	8/9/89	P	188	3.5	53	35			<i>Sorex cinereus</i>	
Frank	8/12/89	P	242	3	52	36			<i>Sorex cinereus</i>	
Frank	8/12/89	P	243	4	56	34	M	S	<i>Sorex cinereus</i>	
Frank	8/12/89	P	245	3	50	35			<i>Sorex cinereus</i>	
Frank	8/12/89	P	246	3	51	37			<i>Sorex cinereus</i>	
Frank	8/12/89	P	253	5	61	40			<i>Sorex cinereus</i>	
Millbrook	8/3/89	P	98	5.5	60	38			<i>Sorex cinereus</i>	
Millbrook	8/3/89	P	103	4.5	55	37			<i>Sorex cinereus</i>	
Millbrook	8/3/89	P	L	5.5	64	40			<i>Sorex cinereus</i>	Dead in Trap
Millbrook	8/6/89	P	152	3	50	31			<i>Sorex cinereus</i>	
Millbrook	8/9/89	P	192	3.5	49	35			<i>Sorex cinereus</i>	
Millbrook	8/9/89	P	193	5	55	40			<i>Sorex cinereus</i>	
Millbrook	8/11/89	P	208	4.5	58	38			<i>Sorex cinereus</i>	
Roy Bridge	8/8/89	P	180	3.5	48	39			<i>Sorex cinereus</i>	
Roy Bridge	8/8/89	P	181	3.5	50	33			<i>Sorex cinereus</i>	
Roy Bridge	8/8/89	P	184	3	51	37			<i>Sorex cinereus</i>	
Roy Bridge	8/10/89	P	196	3	51	36			<i>Sorex cinereus</i>	
Roy Bridge	8/10/89	P	197	6	56	44			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	220	4.5	60	34	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	221	5.5	60	40			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	222	4.5	56	35	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	224	5	64	36			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	225	5.5	67	39			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	226	3.5	52	36			<i>Sorex cinereus</i>	
Roy Bridge	8/11/89	P	227	5.5	65	39			<i>Sorex cinereus</i>	
Roy Bridge	8/12/89	L	228	6.5	60	34	F	Pg L	<i>Sorex cinereus</i>	Dead in Trap
Roy Bridge	8/12/89	P	236	2.5	45	36			<i>Sorex cinereus</i>	
Roy Bridge	8/12/89	P	238	4.5	57	36			<i>Sorex cinereus</i>	
Roy Bridge	8/13/89	P	255	5.5	58	40			<i>Sorex cinereus</i>	
Roy Bridge	8/13/89	P	258	4.5	52	39	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/13/89	P	261	3.5	54	35			<i>Sorex cinereus</i>	

Appendix B

Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Roy Bridge	8/13/89	P	262	5.5	59	43			<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	268	5	51	37	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	269	2	40	25			<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	270	4	54	36	M	S	<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	271	4	54	37			<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	P	272	6	62	34			<i>Sorex cinereus</i>	
Roy Bridge	8/14/89	L	273	4	55	37	F	L	<i>Sorex cinereus</i>	Dead in Trap
Saw Mill	7/31/89	P	45	4.5	51	37			<i>Sorex cinereus</i>	
Saw Mill	8/1/89	L	56	3	53	39			<i>Sorex cinereus</i>	Dead in Trap
Saw Mill	8/3/89	L	116	5.5	55	40			<i>Sorex cinereus</i>	Dead in Trap
Saw Mill	8/3/89	P	117	5.5	58	42			<i>Sorex cinereus</i>	
Saw Mill	8/5/89	P	130	2	50	30			<i>Sorex cinereus</i>	
Steam Mill Tr.	8/1/89	P	76	5.5	58	38			<i>Sorex cinereus</i>	
Steam Mill Tr.	8/1/89	P	77	6.5	62	44			<i>Sorex cinereus</i>	
Steam Mill Tr.	8/1/89	L	78	5	58	40			<i>Sorex cinereus</i>	Dead in Trap
Steam Mill Tr.	8/3/89	P	106	4.5	60	42			<i>Sorex cinereus</i>	
Steam Mill Tr.	8/3/89	P	107	3.5	52	31			<i>Sorex cinereus</i>	
Steeny Kill	7/26/89	P	35	4	56	38			<i>Sorex cinereus</i>	
Steeny Kill	7/26/89	P	36	5	58	40			<i>Sorex cinereus</i>	
Steeny Kill	8/1/89	P	68	2	52	30			<i>Sorex cinereus</i>	
Steeny Kill	8/1/89	P	71	5.5	63	39			<i>Sorex cinereus</i>	
Steeny Kill	8/3/89	P	114	5	60	38			<i>Sorex cinereus</i>	
Wapalanne	7/18/89	P	1	5.25	54	41			<i>Sorex cinereus</i>	
Wapalanne	7/18/89	P	2	5	52	40			<i>Sorex cinereus</i>	
Wapalanne	7/19/89	P	6	5	43	36			<i>Sorex cinereus</i>	
Wapalanne	7/21/89	P	15	5.5	61	38			<i>Sorex cinereus</i>	
Wapalanne	7/21/89	P	17	6	51	40			<i>Sorex cinereus</i>	
Saw Mill	7/28/89	P	39	2.5	41	29			<i>Sorex cinereus</i>	
Steeny Kill	8/1/89	L	73	4.5	65	50			<i>Sorex dispar</i>	Dead in Trap
Frank	8/8/89	L	175	6.5	62	41			<i>Sorex fumeus</i>	Dead in Trap
Frank	8/10/89	P	201	5.5	56	40			<i>Sorex fumeus</i>	
Frank	8/10/89	P	202	5	57	38			<i>Sorex fumeus</i>	
Ice Cave	8/25/89	S	301	5.5	63	50	M	S	<i>Sorex fumeus</i>	Uniform Grav
Millbrook	8/2/89	P	82	5	65	40			<i>Sorex fumeus</i>	
Millbrook	8/3/89	P	99	5.5	64	44			<i>Sorex fumeus</i>	
Millbrook	8/3/89	P	100	5	62	46			<i>Sorex fumeus</i>	
Millbrook	8/3/89	P	101	6	65	45			<i>Sorex fumeus</i>	
Millbrook	8/3/89	P	104	6	68	45			<i>Sorex fumeus</i>	
Millbrook	8/4/89	P	121	7	70	40			<i>Sorex fumeus</i>	
Millbrook	8/10/89	P	199	5.5	56	42			<i>Sorex fumeus</i>	
Millbrook	8/11/89	P	207	8.5	68	40	M	S	<i>Sorex fumeus</i>	
Roy Bridge	8/9/89	P	186	4	52	36			<i>Sorex fumeus</i>	
Roy Bridge	8/10/89	L	198	6	64	39			<i>Sorex fumeus</i>	Dead in Trap
Roy Bridge	8/11/89	L	223	5.5	63	40			<i>Sorex fumeus</i>	Dead in Trap
Roy Bridge	8/12/89	P	229	4.5	65	40			<i>Sorex fumeus</i>	
Roy Bridge	8/13/89	P	259	5	60	41			<i>Sorex fumeus</i>	
Roy Bridge	8/13/89	P	260	7	65	40	M	S	<i>Sorex fumeus</i>	
Roy Bridge	8/13/89	P	263	4.5	61	42			<i>Sorex fumeus</i>	
Roy Bridge	8/14/89	P	267	5.5	65	42			<i>Sorex fumeus</i>	
Roy Bridge	8/16/89	P	282	7	70	41	F	L	<i>Sorex fumeus</i>	
Saw Mill	7/31/89	L	46	5.5	60	40			<i>Sorex fumeus</i>	Dead in Trap
Saw Mill	8/1/89	P	61	6	65	41			<i>Sorex fumeus</i>	
Saw Mill	8/1/89	L	62	5.5	64	43			<i>Sorex fumeus</i>	Dead in Trap
Saw Mill	8/5/89	P	128	5	58	43			<i>Sorex fumeus</i>	
Saw Mill	8/5/89	P	129	8.5	74	40			<i>Sorex fumeus</i>	

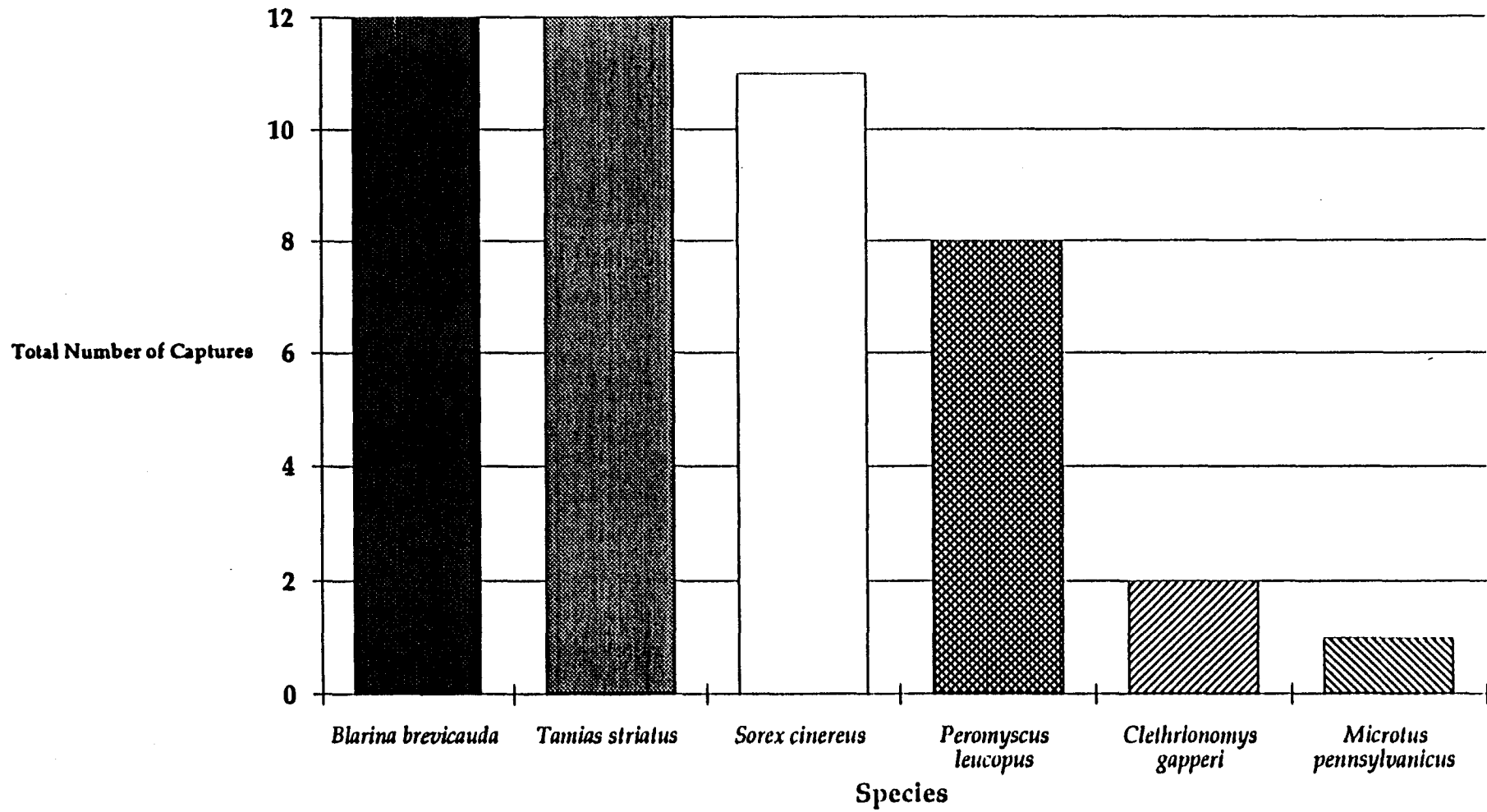
Appendix B

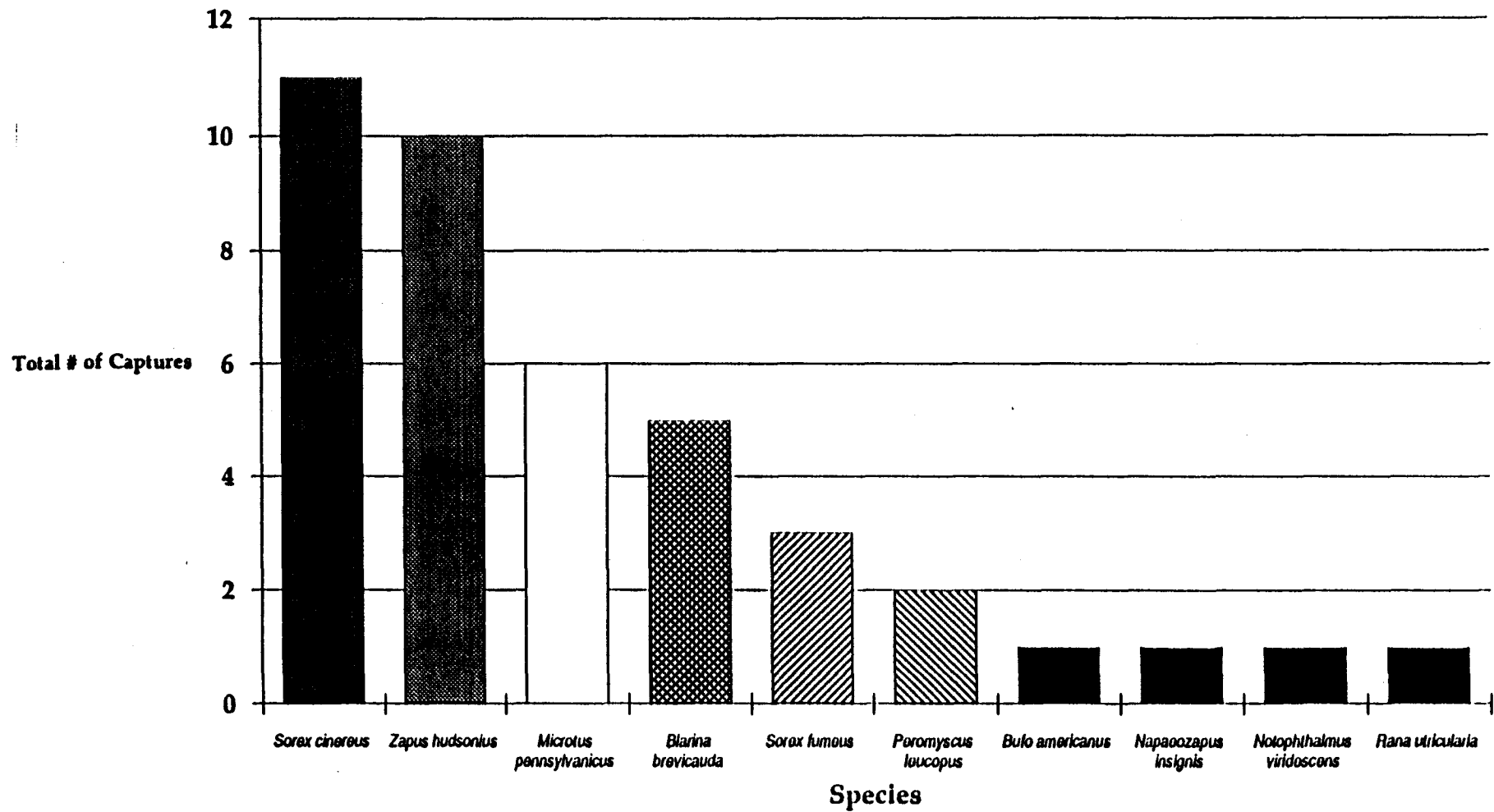
Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Steam Mill Tr.	7/31/89	L	49	6	55	41			<i>Sorex fumeus</i>	Dead in Trap
Steam Mill Tr.	7/31/89	P	51	6.5	60	45			<i>Sorex fumeus</i>	
Steam Mill Tr.	8/6/89	P	145	5	61	47			<i>Sorex fumeus</i>	
Steeny Kill	7/27/89	L	37	6	60	42			<i>Sorex fumeus</i>	Dead in Trap
Steeny Kill	8/1/89	P	66	6	62	43			<i>Sorex fumeus</i>	
Steeny Kill	8/1/89	P	67	5.5	63	41			<i>Sorex fumeus</i>	
Steeny Kill	8/1/89	P	69	5.5	63	42			<i>Sorex fumeus</i>	
Steeny Kill	8/1/89	L	70	6	65	46			<i>Sorex fumeus</i>	Dead in Trap
Steeny Kill	8/1/89	L	72	5.5	65	43			<i>Sorex fumeus</i>	Dead in Trap
Steeny Kill	8/3/89	P	113	6	62	42			<i>Sorex fumeus</i>	
Wapalanne	7/18/89	P	3	8	66	39			<i>Sorex fumeus</i>	
Wapalanne	7/18/89	P	4	7	50				<i>Sorex fumeus</i>	Tail cut
Wapalanne	7/21/89	P	14	5.5	60	38			<i>Sorex fumeus</i>	
Wapalanne	7/21/89	P	16	6	65	45			<i>Sorex fumeus</i>	
Wapalanne	7/21/89	P	18	6	55	46			<i>Sorex fumeus</i>	
Wapalanne	7/23/89	P	23	5.5	56	46			<i>Sorex fumeus</i>	
Wapalanne	7/23/89	P	25	6	59	40			<i>Sorex fumeus</i>	
Steam Mill Tr.	8/6/89	P	149	2	45	29			<i>Sorex hoyi</i>	
Steeny Kill	8/3/89	P	115	2.5	44	26			<i>Sorex hoyi</i>	
Cedar Bog	7/28/89	L	/	65.5	128	76	F	NR	<i>Tamias striatus</i>	Released
Cedar Bog	7/28/89	L	/	79	132	81	F	NR	<i>Tamias striatus</i>	Released
Cedar Bog	7/28/89	L	/	83	133	80	M	NS	<i>Tamias striatus</i>	Released
Cedar Bog	7/28/89	L	/	120	148	94	F	Pg	<i>Tamias striatus</i>	Released
Cedar Bog	7/29/89	L	/	118	145	96	F	Pg	<i>Tamias striatus</i>	Released
Cedar Bog	7/30/89	L	/	75	130	82			<i>Tamias striatus</i>	Released
Cedar Bog	7/30/89	L	/	83	130	80	M	NS	<i>Tamias striatus</i>	Released
Cedar Bog	7/30/89	L	/		Escaped				<i>Tamias striatus</i>	Released
Cedar Bog	7/31/89	L	/	76	129	80	F	I	<i>Tamias striatus</i>	Released
Cedar Bog	8/1/89	L	53						<i>Tamias striatus</i>	Dead in Trap
Cedar Bog	8/2/89	L	/	130	148	94	F	Pg	<i>Tamias striatus</i>	Released
Cedar Bog	8/4/89	L	/	75			M	NS	<i>Tamias striatus</i>	Released
Cedar Bog	8/5/89	L	/	90			M	NS	<i>Tamias striatus</i>	Released
Frank	8/3/89	P	108	18	79	110	F	L	<i>Zapus hudsonius</i>	
Frank	8/3/89	P	109	8	59	115			<i>Zapus hudsonius</i>	
Frank	8/3/89	P	110	9	64	113			<i>Zapus hudsonius</i>	
Frank	8/7/89	P	163	20.5	80	122	F	NR	<i>Zapus hudsonius</i>	
Frank	8/7/89	P	165	17.5	71	104	M	S	<i>Zapus hudsonius</i>	
Frank	8/9/89	P	187	18	75	111	M	S	<i>Zapus hudsonius</i>	
Frank	8/9/89	P	189	22	78	132	F	Pg L	<i>Zapus hudsonius</i>	
Frank	8/10/89	P	203	19	77	120	F	NR	<i>Zapus hudsonius</i>	
Frank	8/11/89	P	217	16	71	115	F	NR	<i>Zapus hudsonius</i>	
Frank	8/12/89	P	252	16.5	75	116	M	S	<i>Zapus hudsonius</i>	
Millbrook	8/2/89	P	80	17	72	120	F	NR	<i>Zapus hudsonius</i>	
Roy Bridge	8/12/89	P	230	17.5	75	115	M	NS	<i>Zapus hudsonius</i>	
Roy Bridge	8/12/89	P	239	17	76	120	F	NR	<i>Zapus hudsonius</i>	
Roy Bridge	8/12/89	P	240	19.5	76	116	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/12/89	P	241	21	82	120	F	Pg L	<i>Zapus hudsonius</i>	
Roy Bridge	8/15/89	P	275	18	81	121	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/15/89	P	276	16.5	72	120	M	NS	<i>Zapus hudsonius</i>	
Roy Bridge	8/16/89	P	278	17.5	84	122	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/16/89	P	283	23	80	121	F	L	<i>Zapus hudsonius</i>	
Roy Bridge	8/17/89	P	286	15	74	119	F	NR	<i>Zapus hudsonius</i>	
Roy Bridge	8/17/89	P	287	9.5	64	109	F	NR	<i>Zapus hudsonius</i>	
Roy Bridge	8/17/89	P	288	13		103	M	S	<i>Zapus hudsonius</i>	
Roy Bridge	8/17/89	P	289	15		112	M	S	<i>Zapus hudsonius</i>	

Appendix B

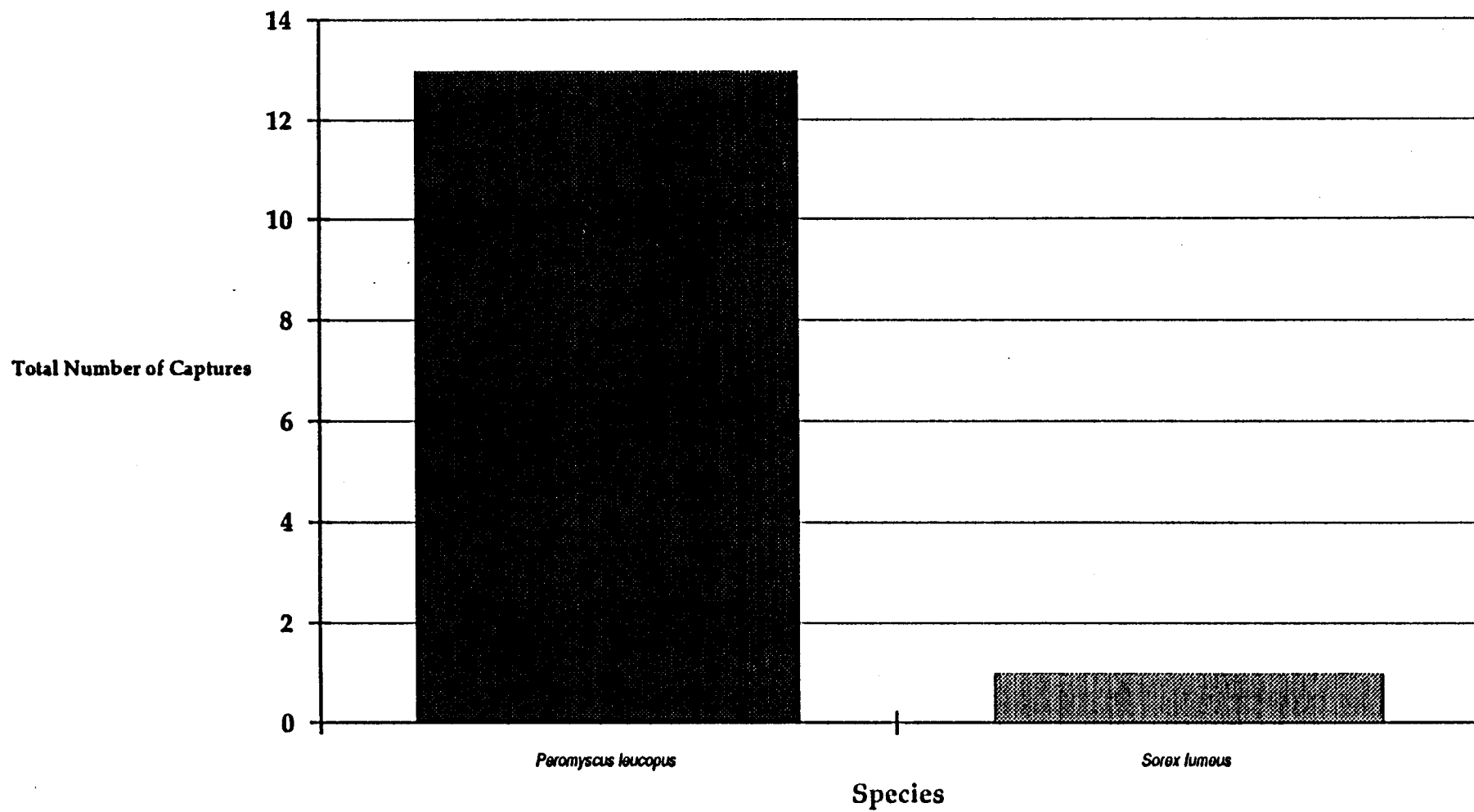
Location	Date	Trap	Sp#	Wt(g)	Length	Tail	Sex	Repro	Species	Other
Saw Mill	8/1/89	P	58	19	72	125	F		<i>Zapus hudsonius</i>	
Saw Mill	8/1/89	P	59	16	72	107	M	S	<i>Zapus hudsonius</i>	
Saw Mill	8/1/89	P	60	15.5	76	121	M	S	<i>Zapus hudsonius</i>	
Steam Mill Tr.	8/6/89	P	147	19.5	80	115	M	S	<i>Zapus hudsonius</i>	
Wapalanne	7/25/89	P	32	30	82	121	F	Pg/L	<i>Zapus hudsonius</i>	

CEDAR BOG: Capture Records

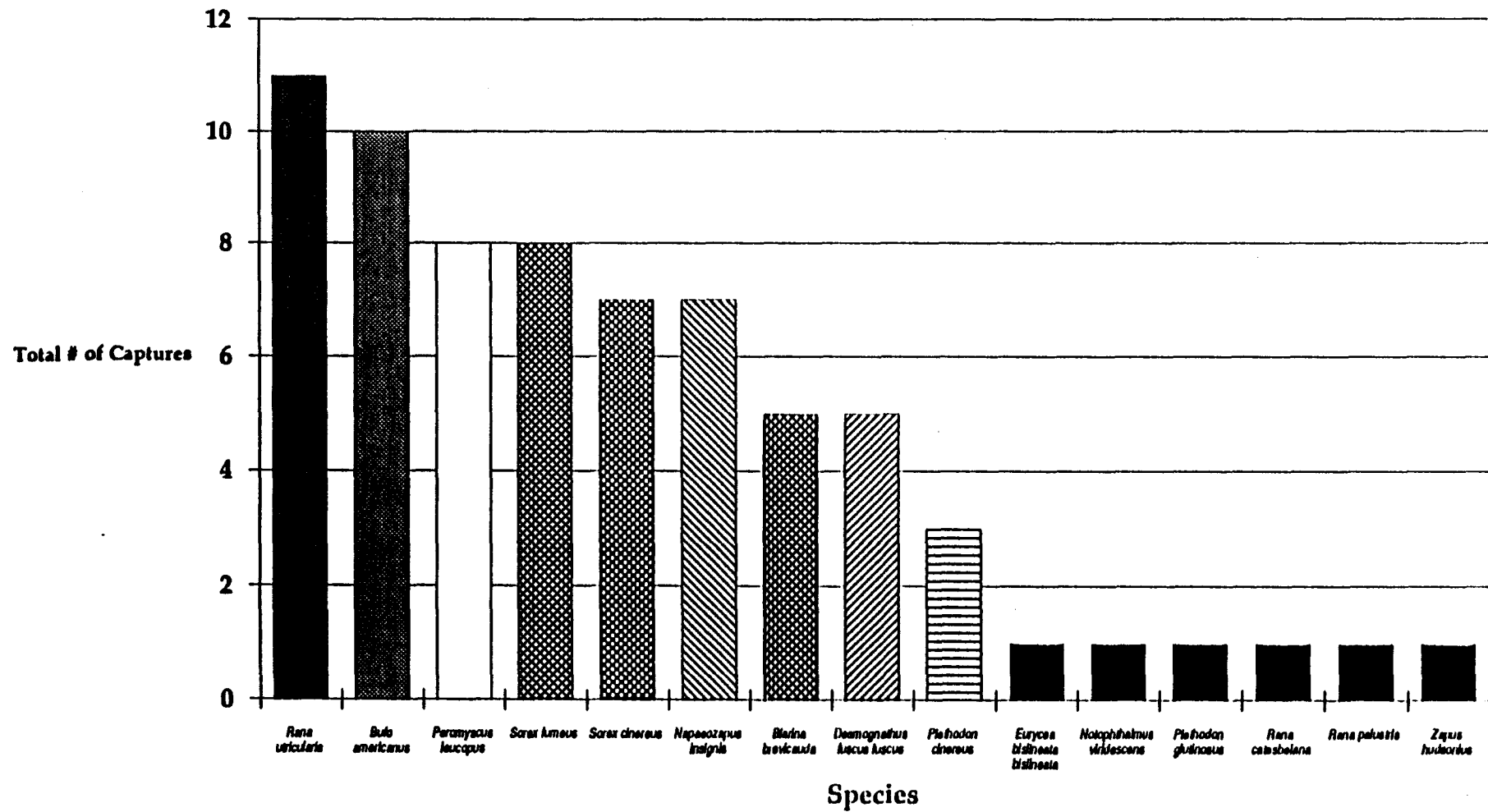


FRANK Study Site: Capture Records

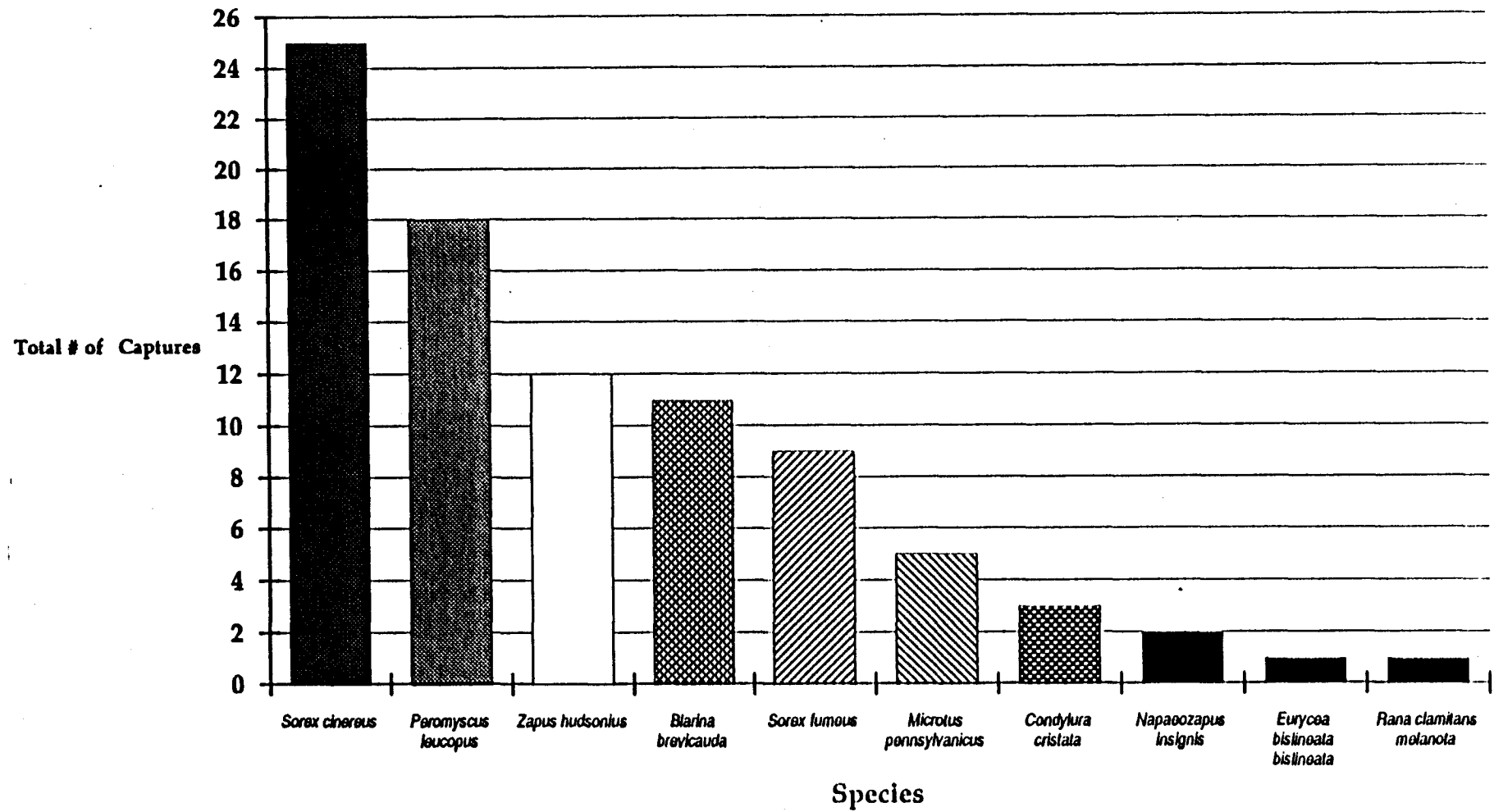
ICE CAVE Study Site: Capture Records



MILLBROOK Study Site: Capture Records

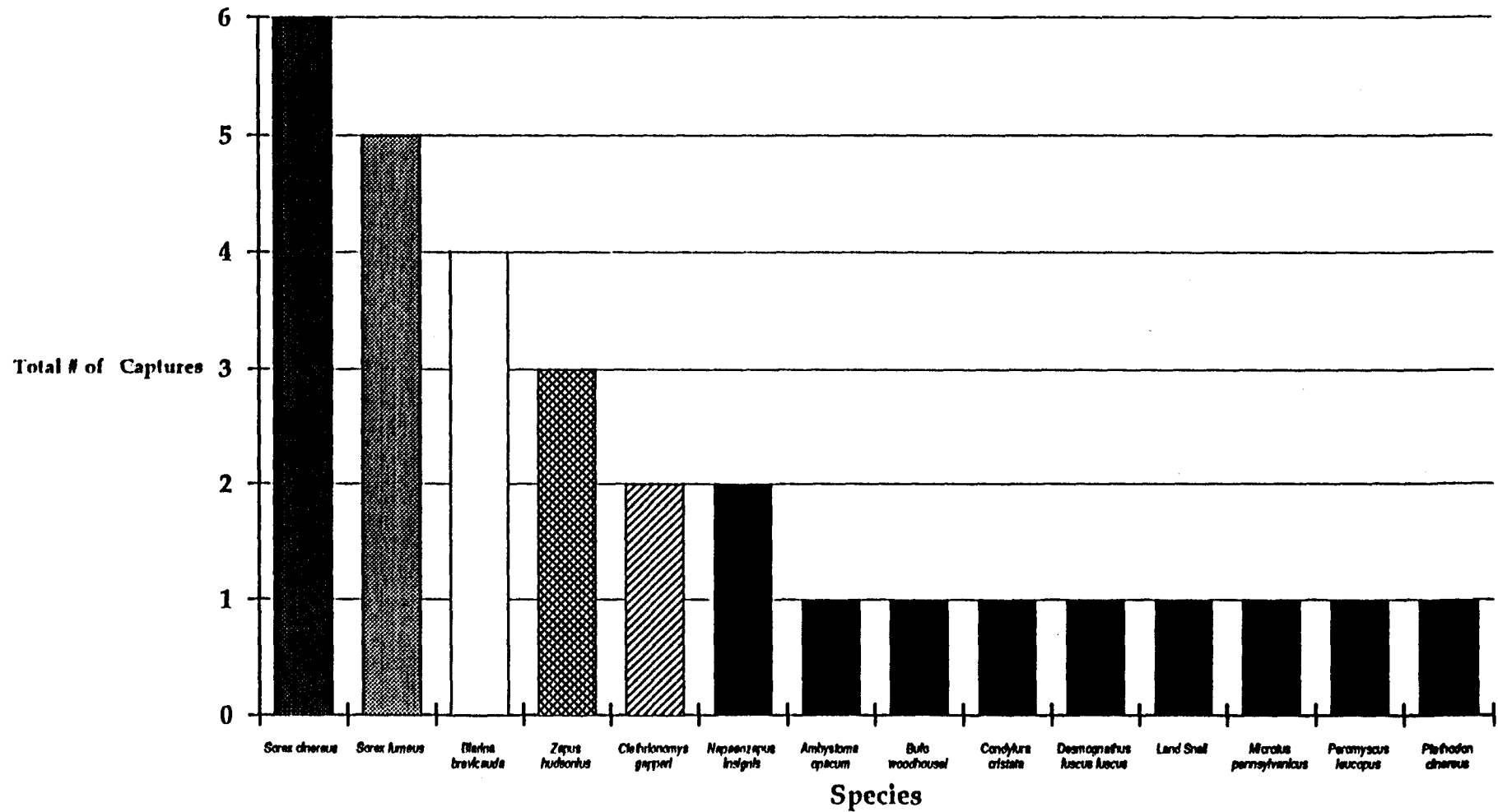


ROY BRIDGE Study Site: Capture Records



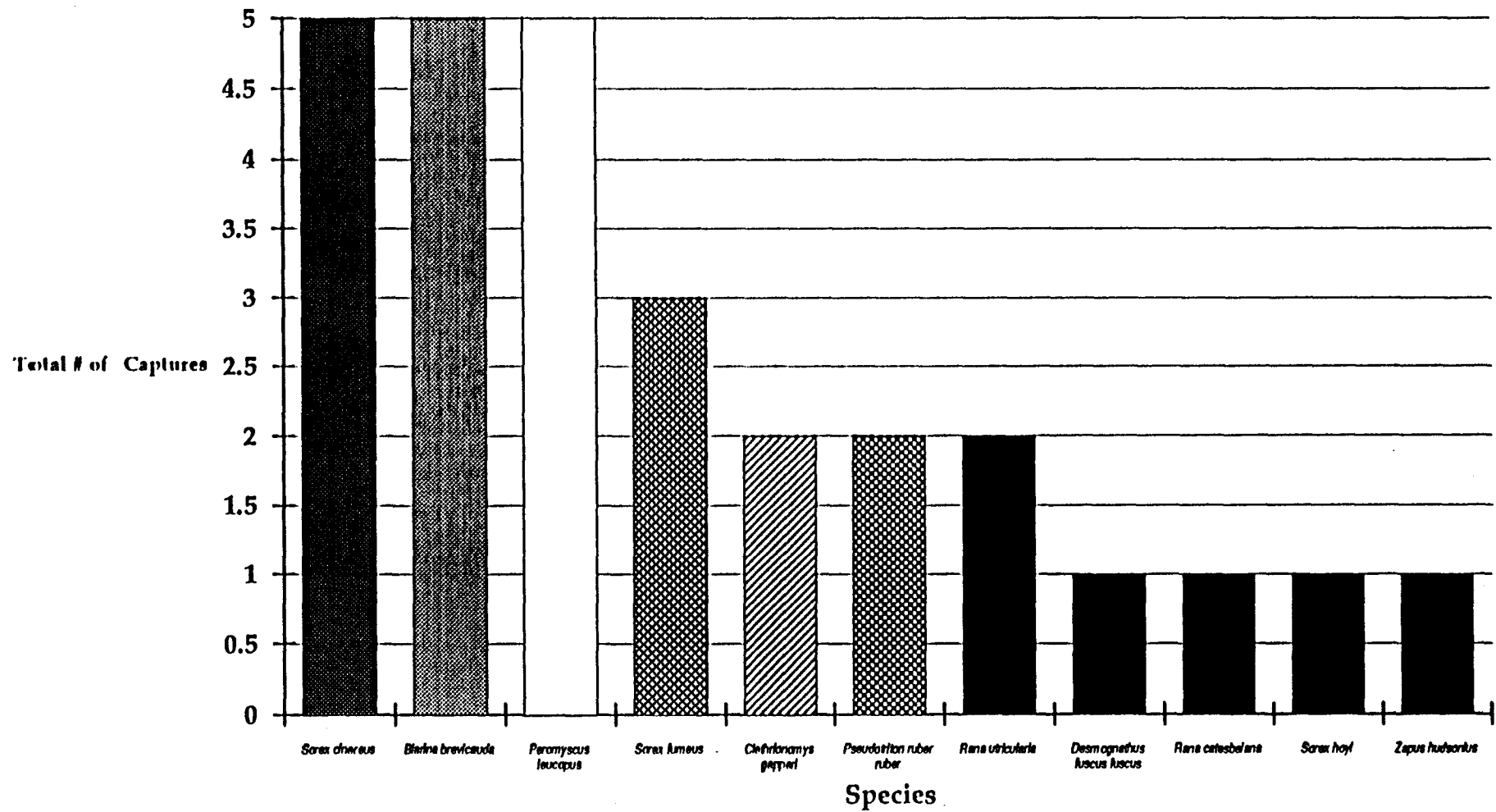
APPENDIX C

SAW MILL Study Site: Capture Records



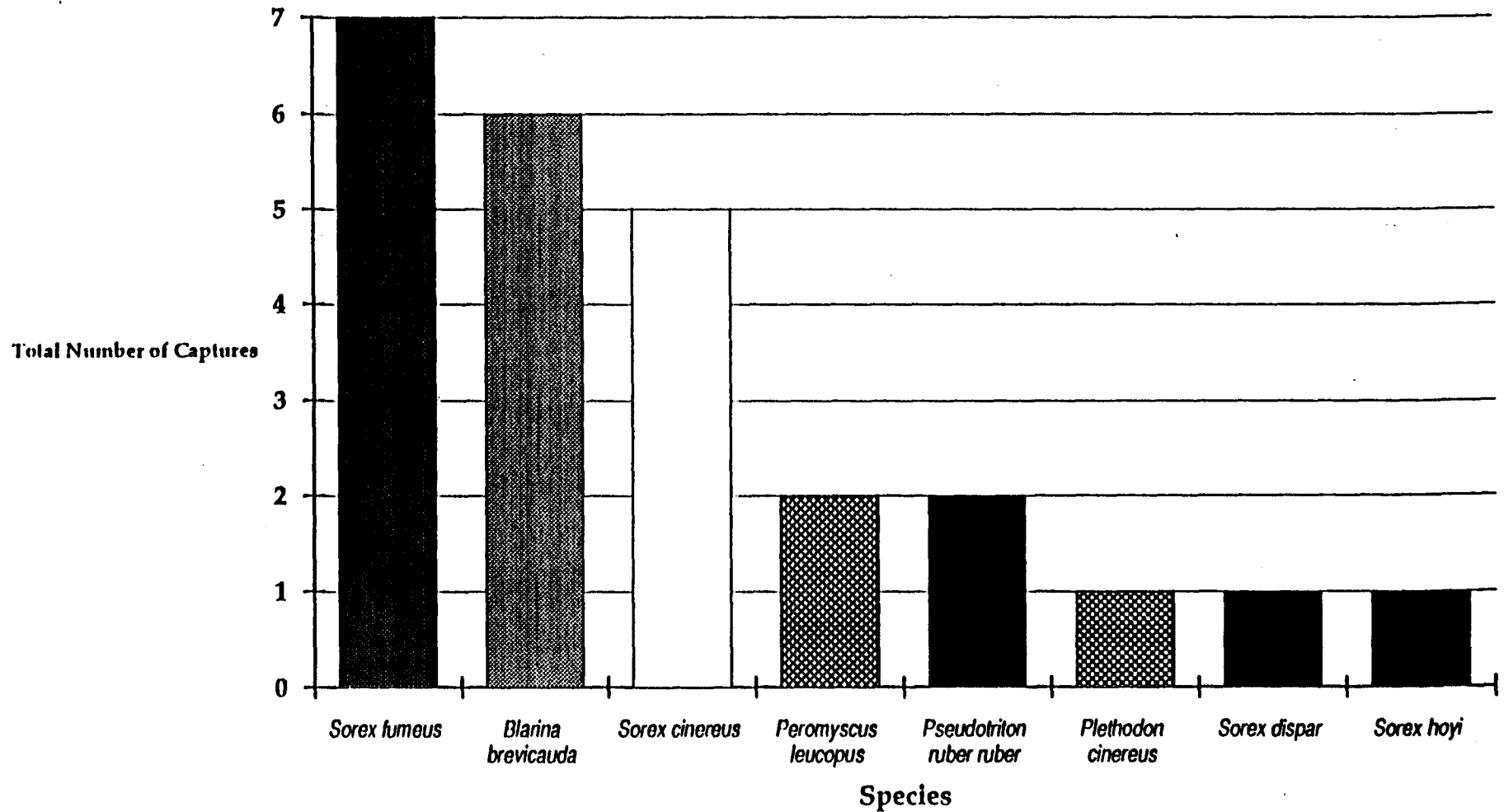
APPENDIX C

STEAM MILL TRAIL Study Site: Capture Records



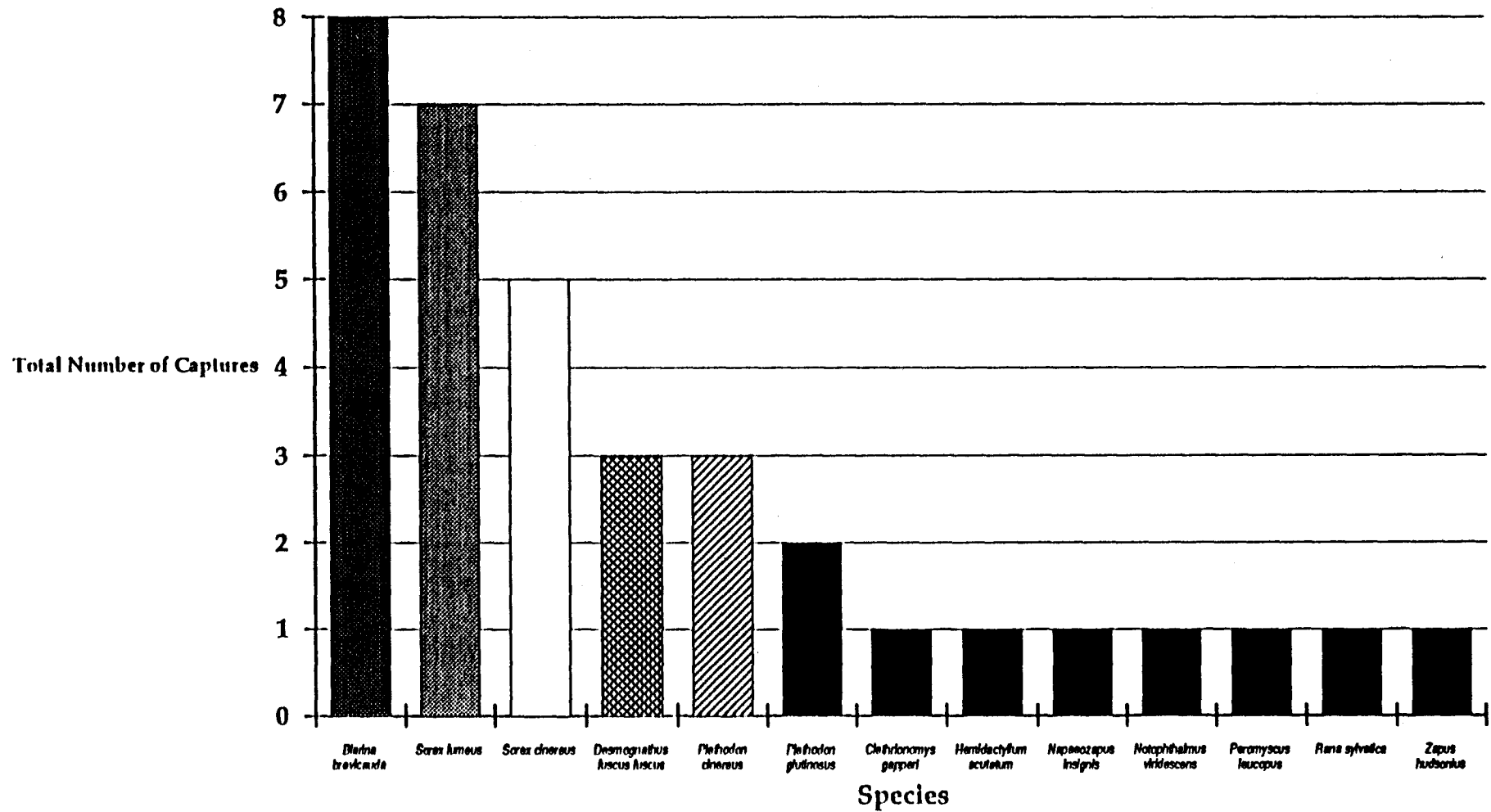
APPENDIX C

STEENY KILL Study Site: Capture Records

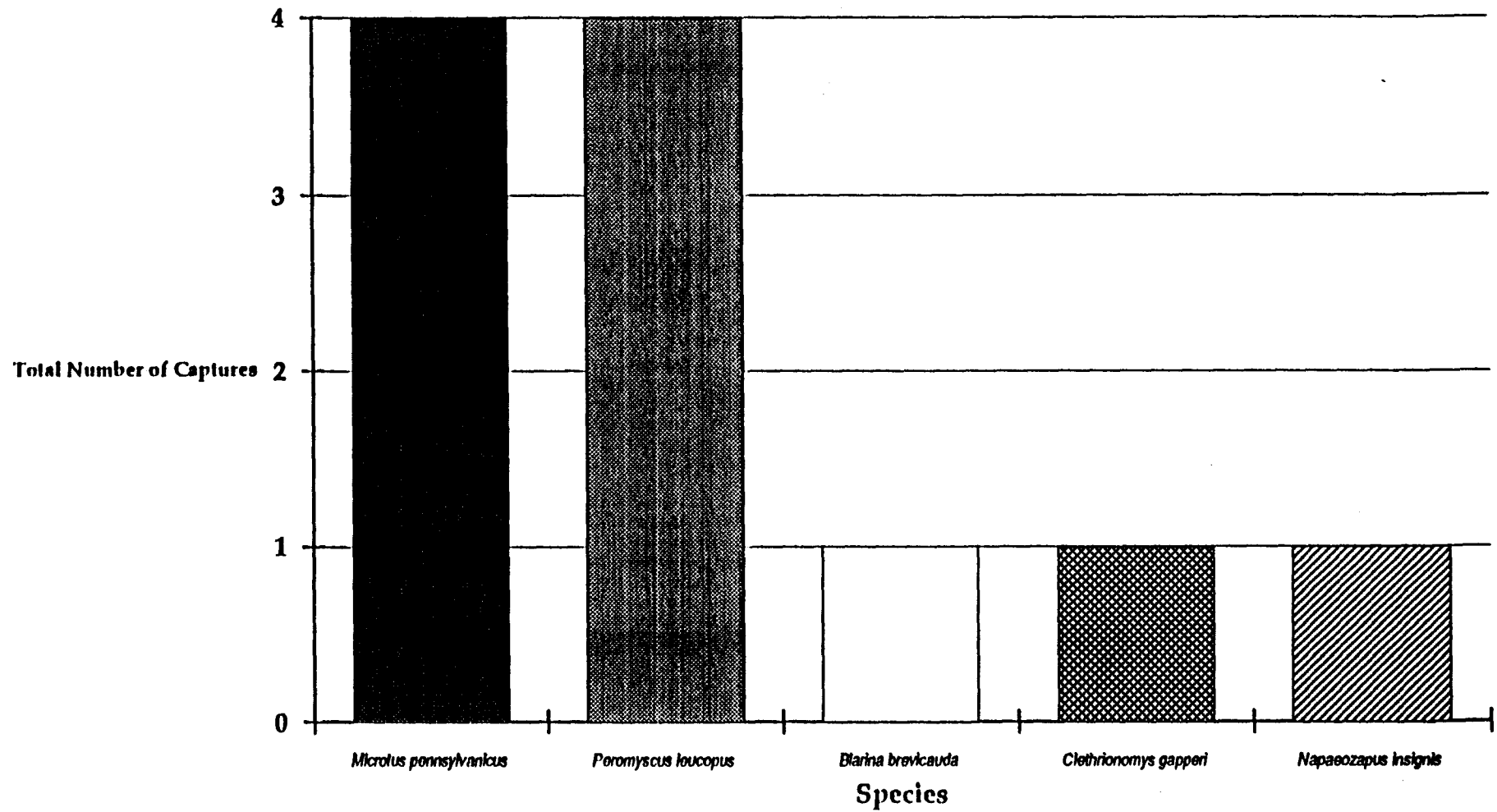


APPENDIX C

WAPALANNE Study Site: Capture Records



YARDS CREEK Study Site: Capture Records



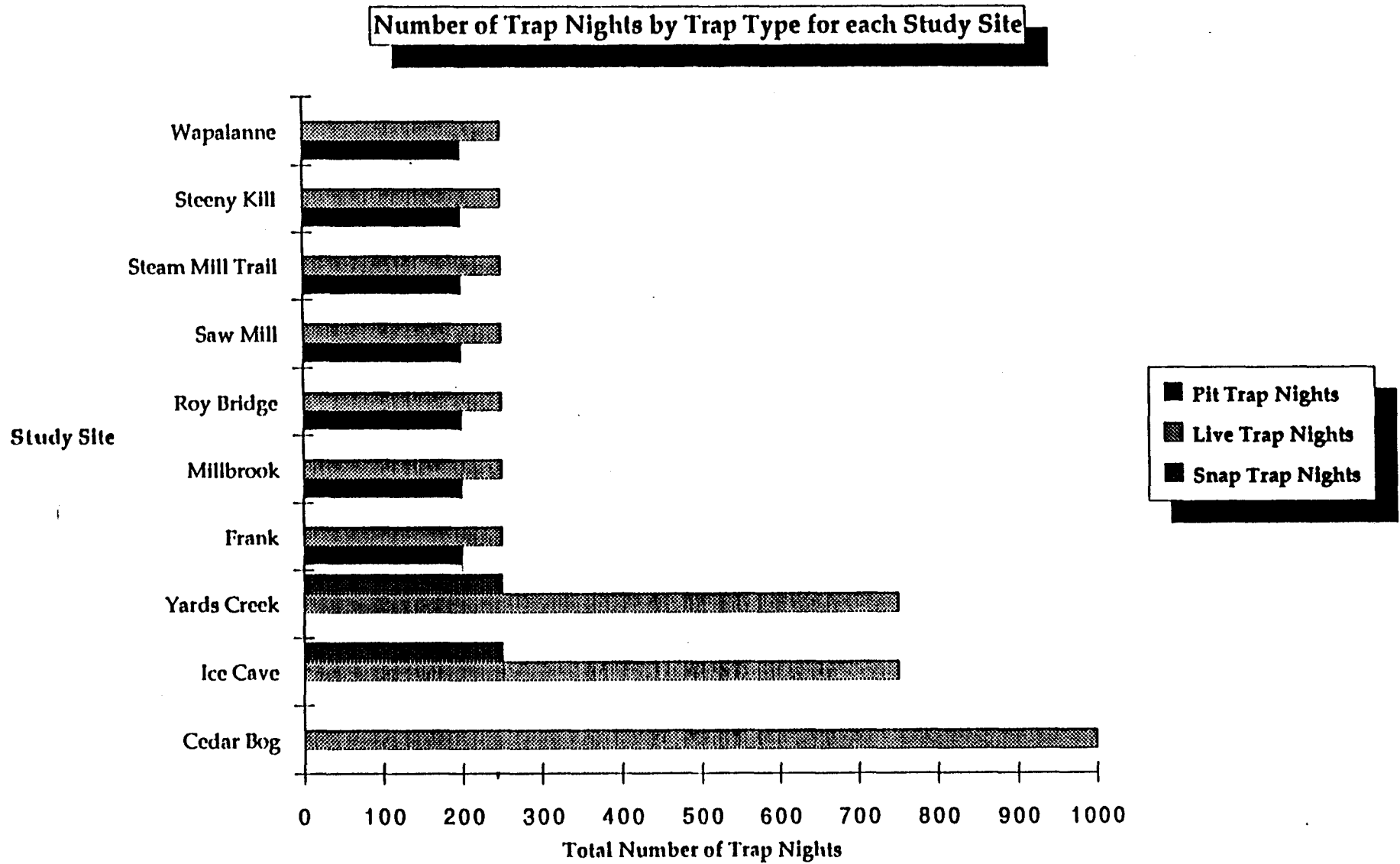


Figure 3

Trapping Method: Total Number of Trap Nights

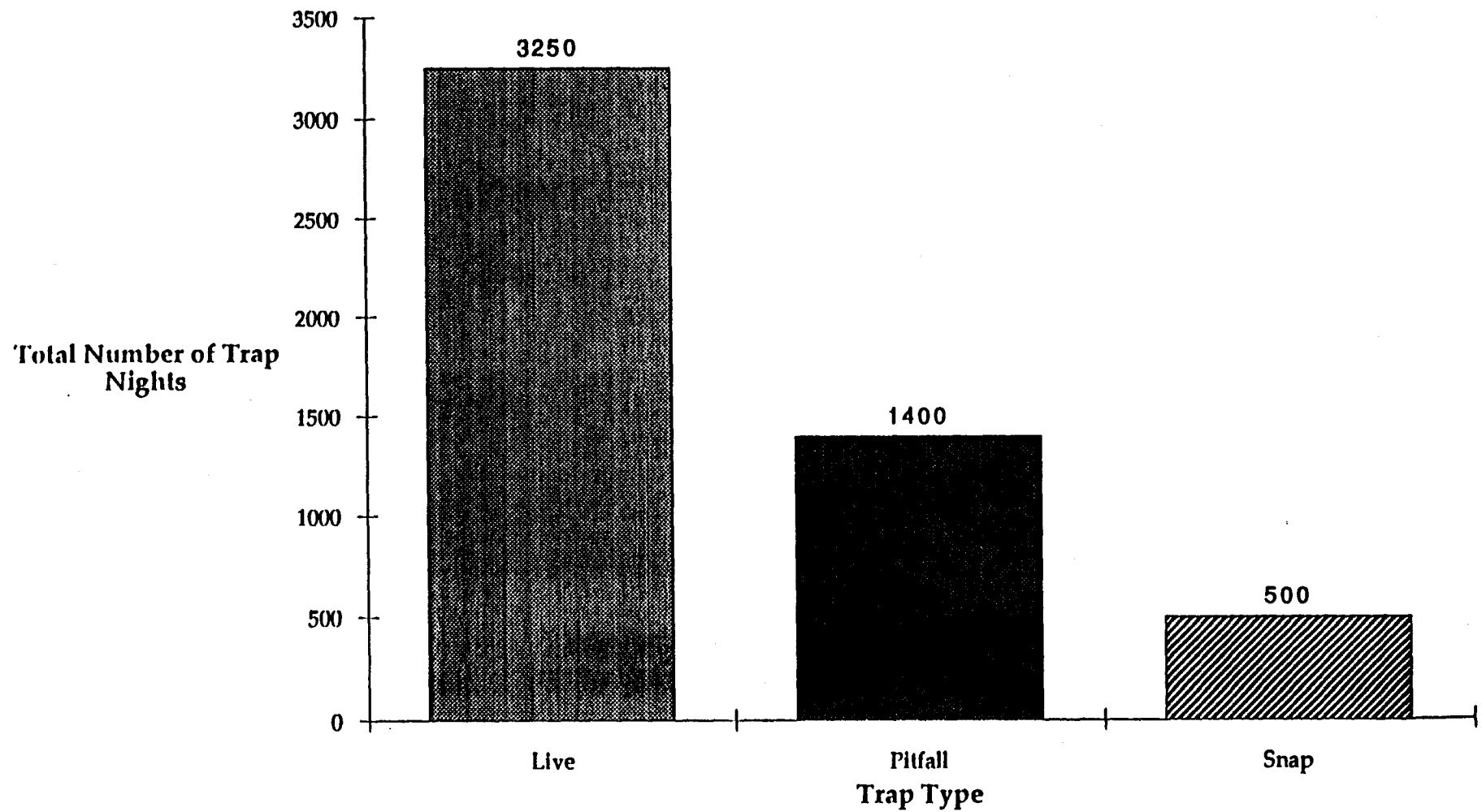


Figure 4

Trapping Methods: Total Number of Captures

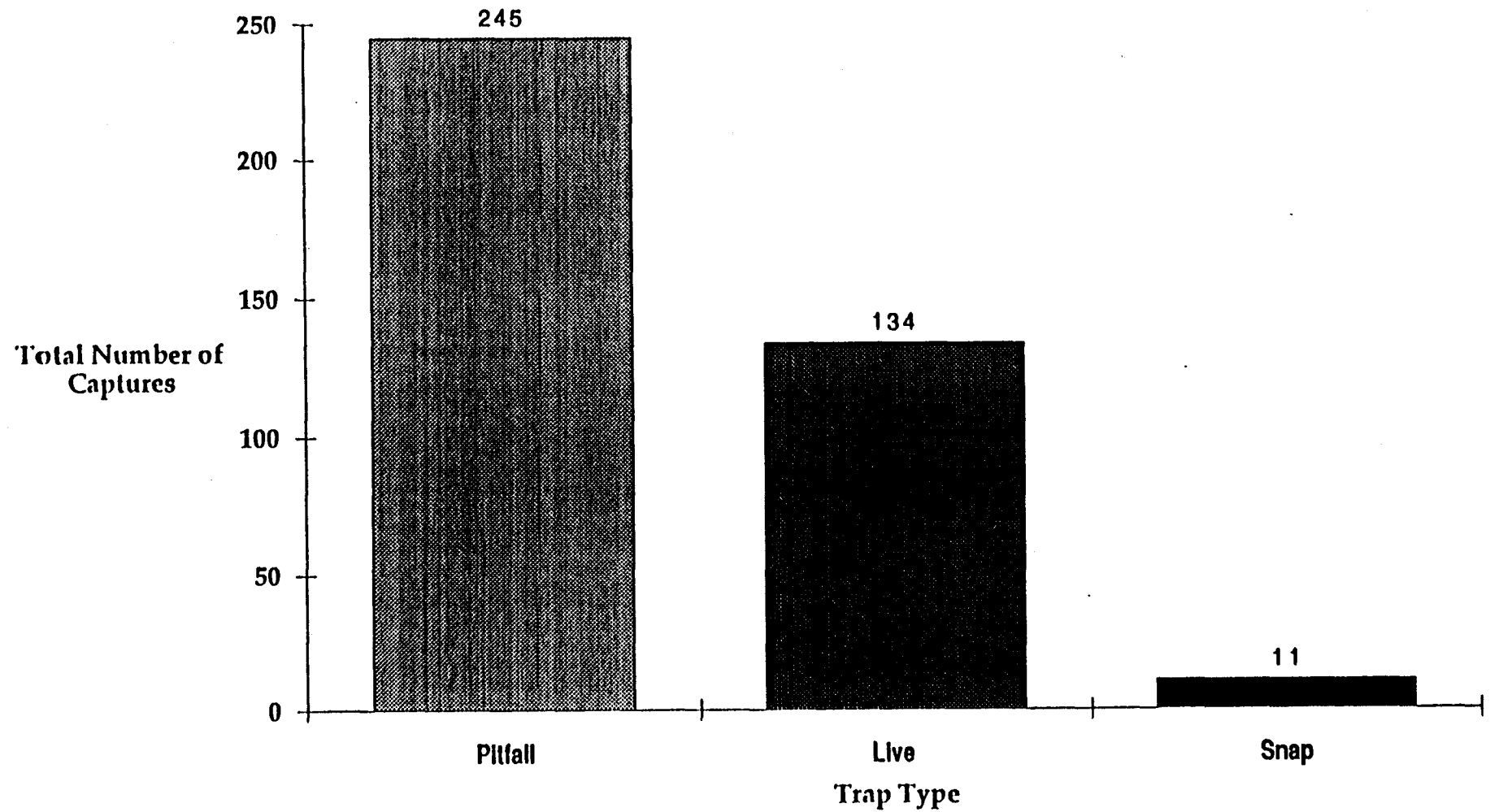


Figure 5

Total Captures: Mammals vs Herptiles

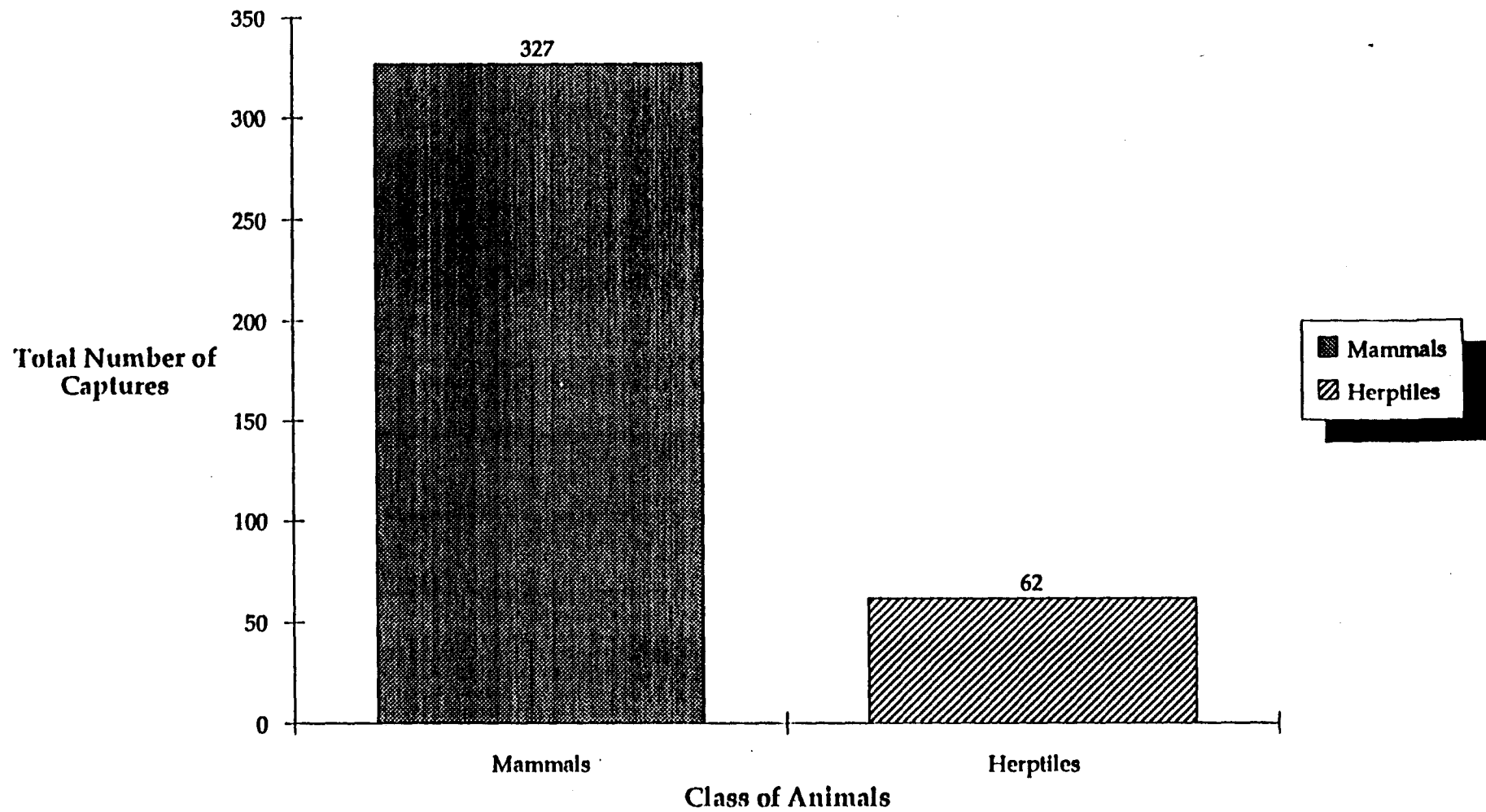


Figure 6

Number of Captures at each Study Site

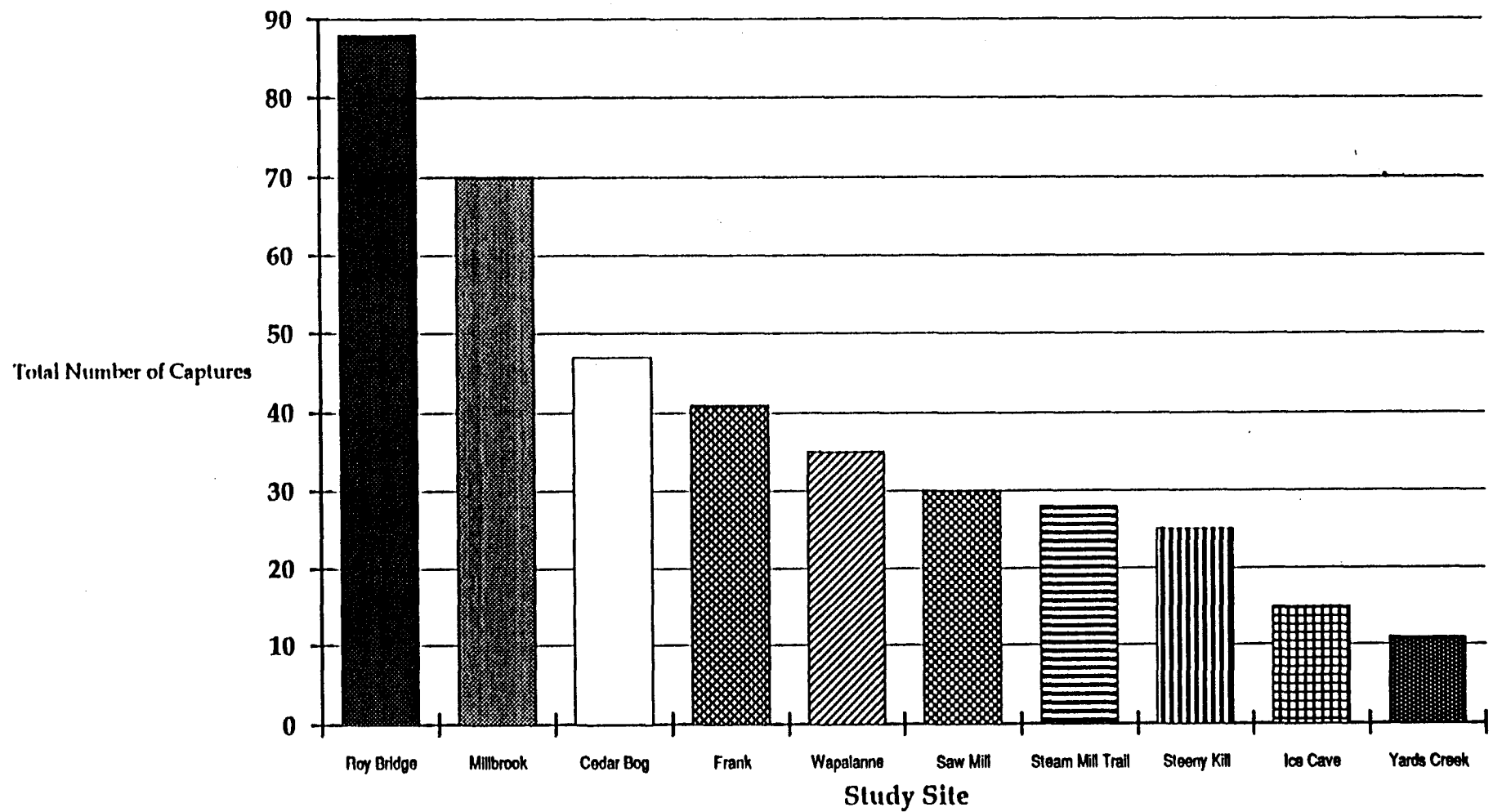


Figure 7

Total Number of Each Mammalian Species Captured

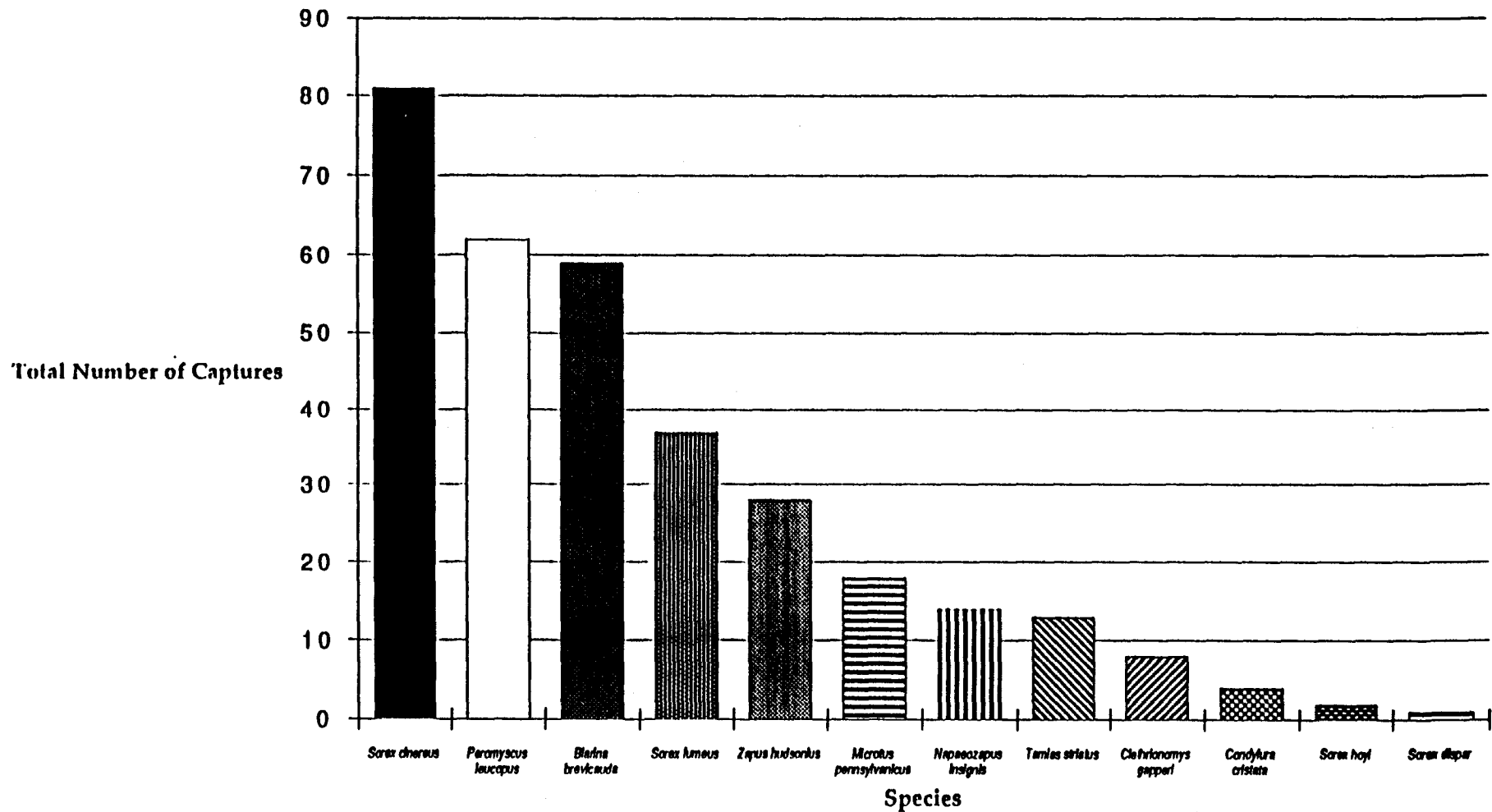
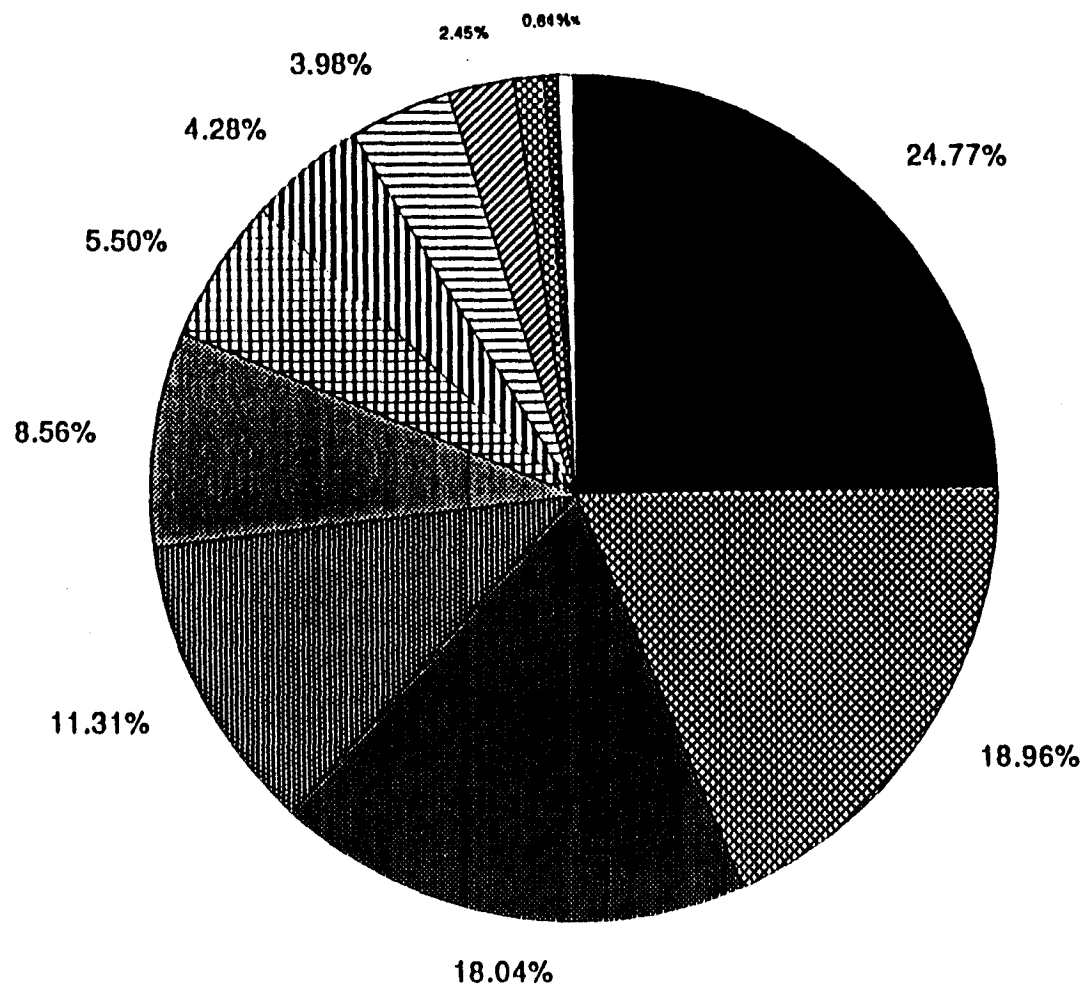


Figure 8

Mammalian Species: % Captures



- *Sorex cinereus*
- ▨ *Peromyscus leucopus*
- *Blarina brevicauda*
- *Sorex fumeus*
- ▨ *Zapus hudsonius*
- ▨ *Microtus pennsylvanicus*
- ▨ *Napaeozapus insignis*
- ▨ *Tamias striatus*
- ▨ *Clethrionomys gapperi*
- ▨ *Condylura cristata*
- ▨ *Sorex hoyi*
- *Sorex dispar*

Figure 9

% of Total Captures: Mammals vs Herptiles

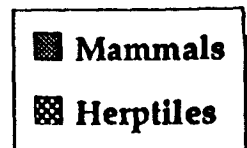
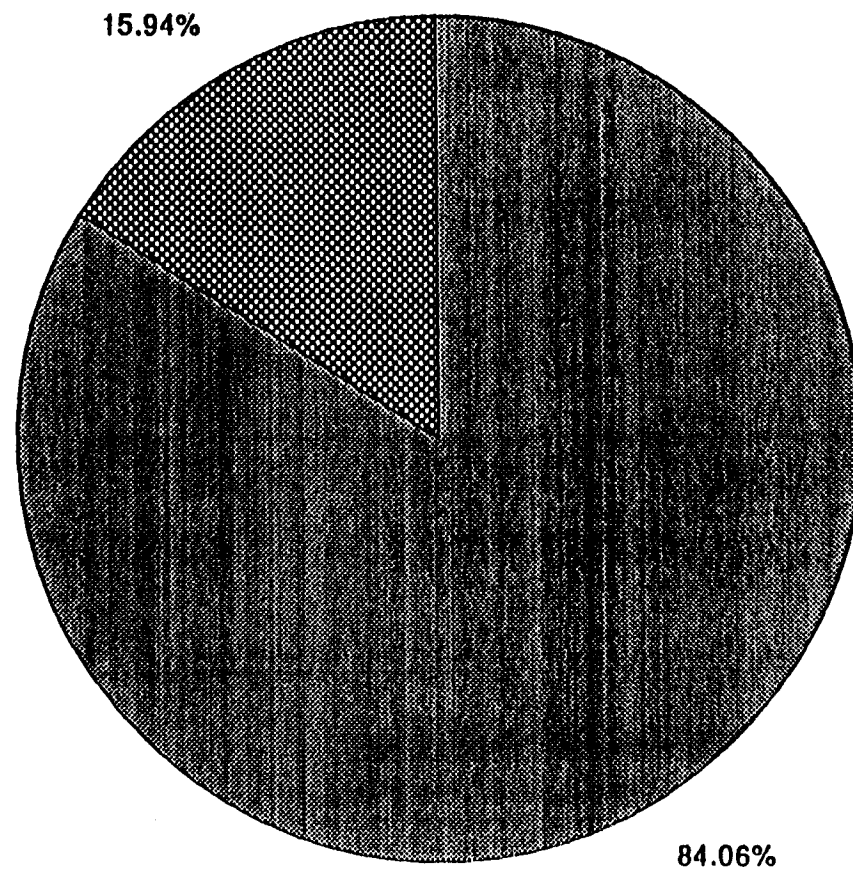


Figure 10

Total Number of Each Herptilian Species Captured

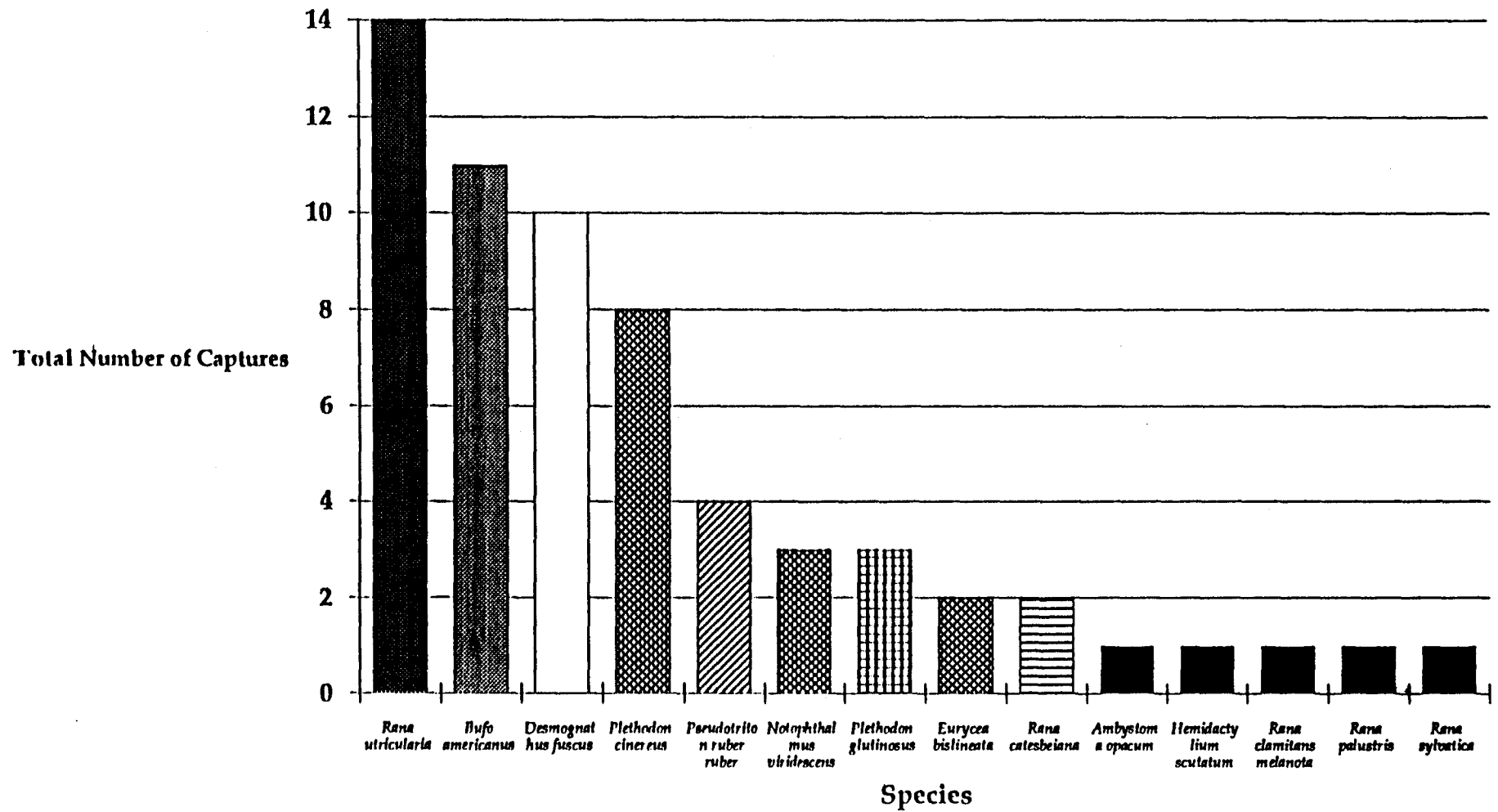


Figure 11

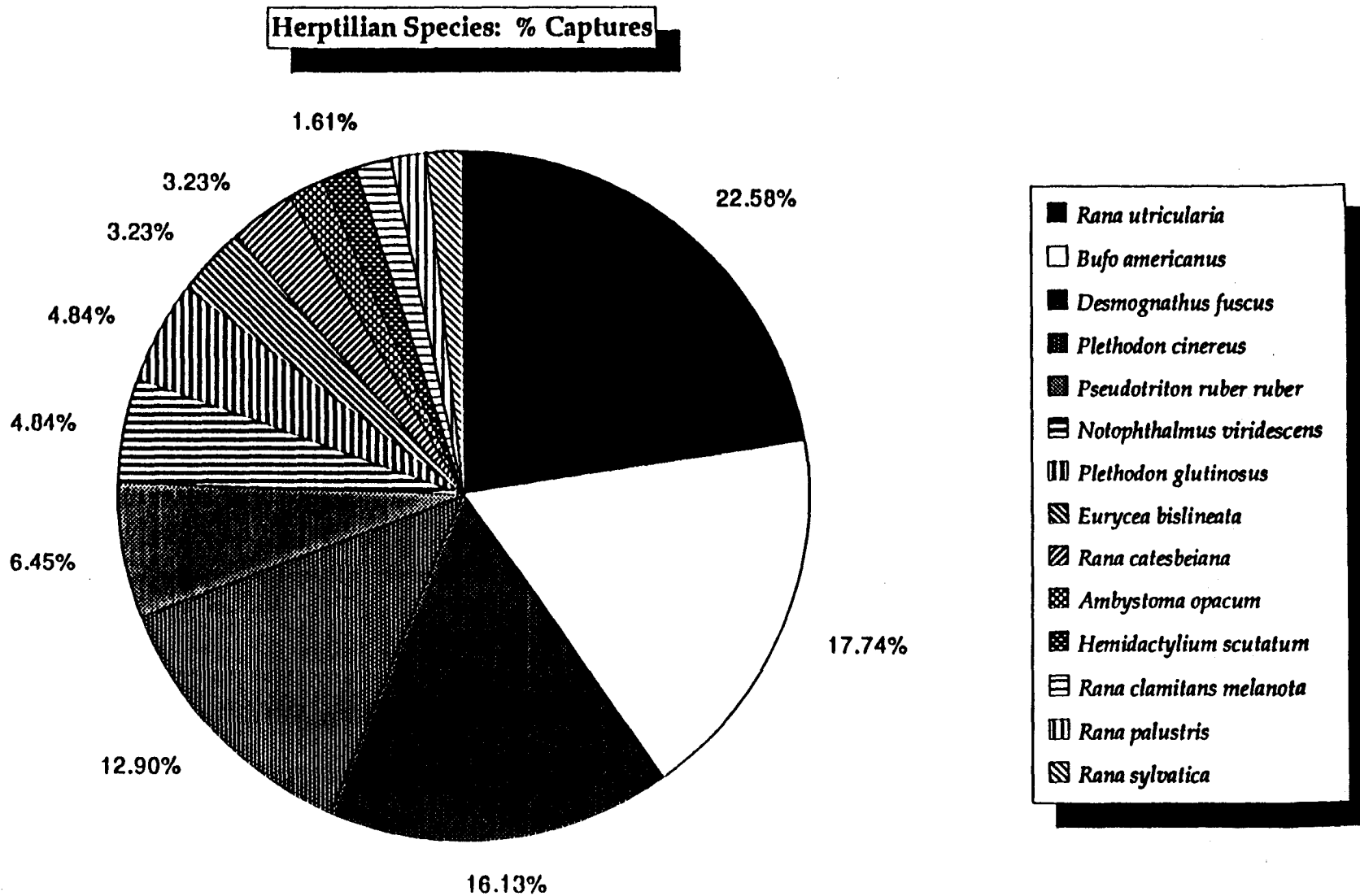


Figure 12

SPECIES DIVERSITY: Total Number of Different Species Captured at each Study Site

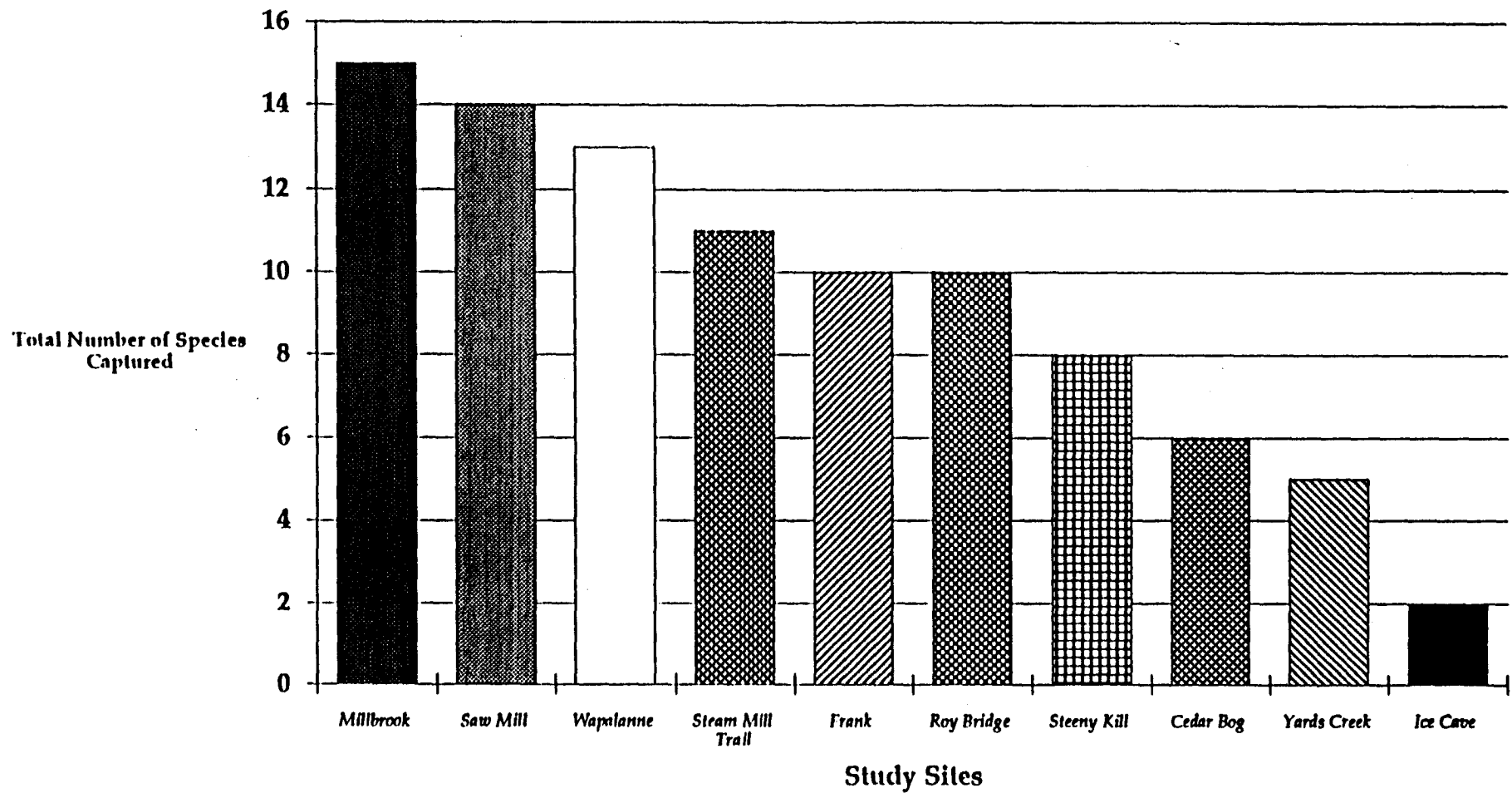


Figure 13





Figure 1C

2

3 Miles

3

4 Kilometers

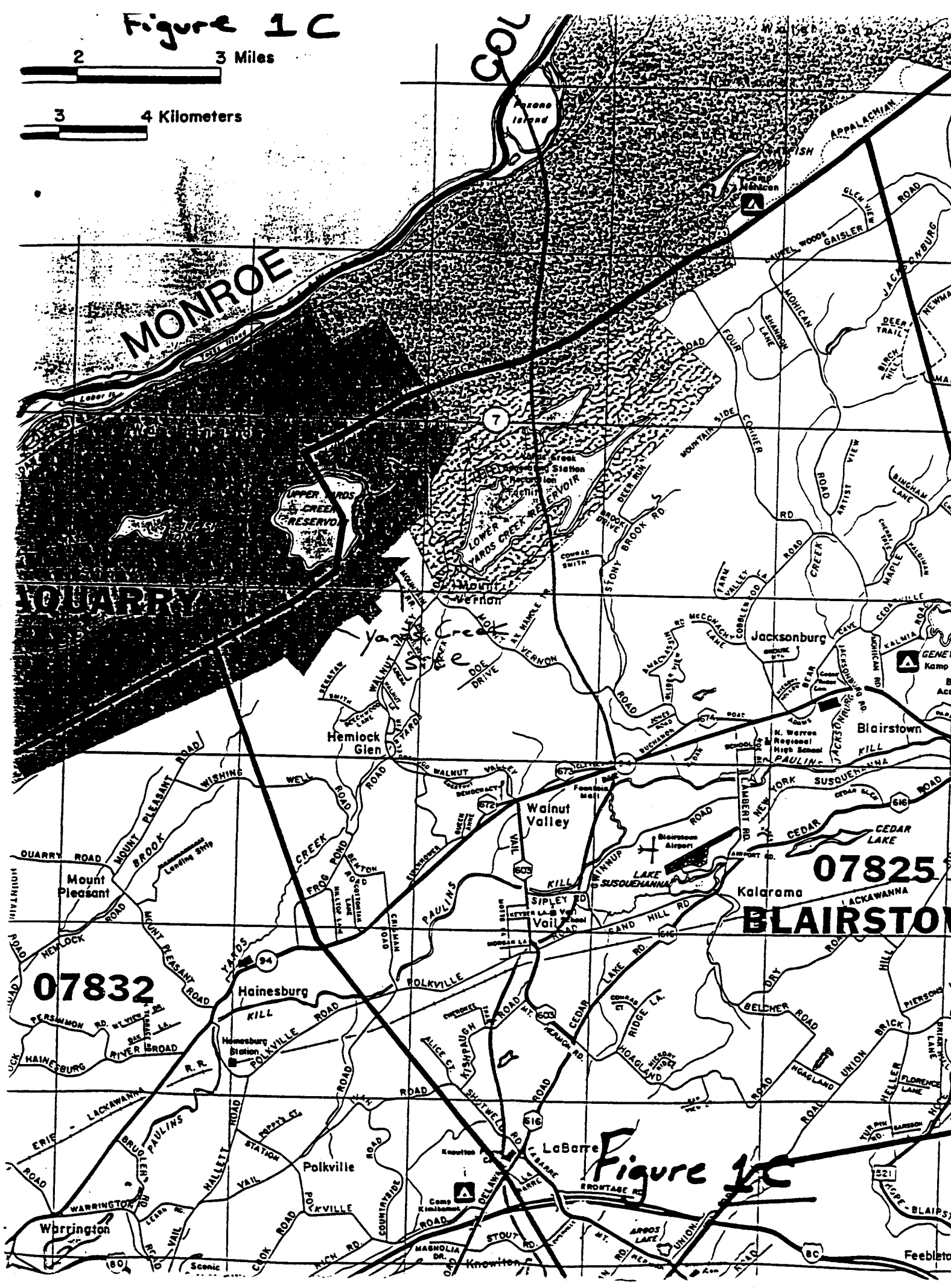
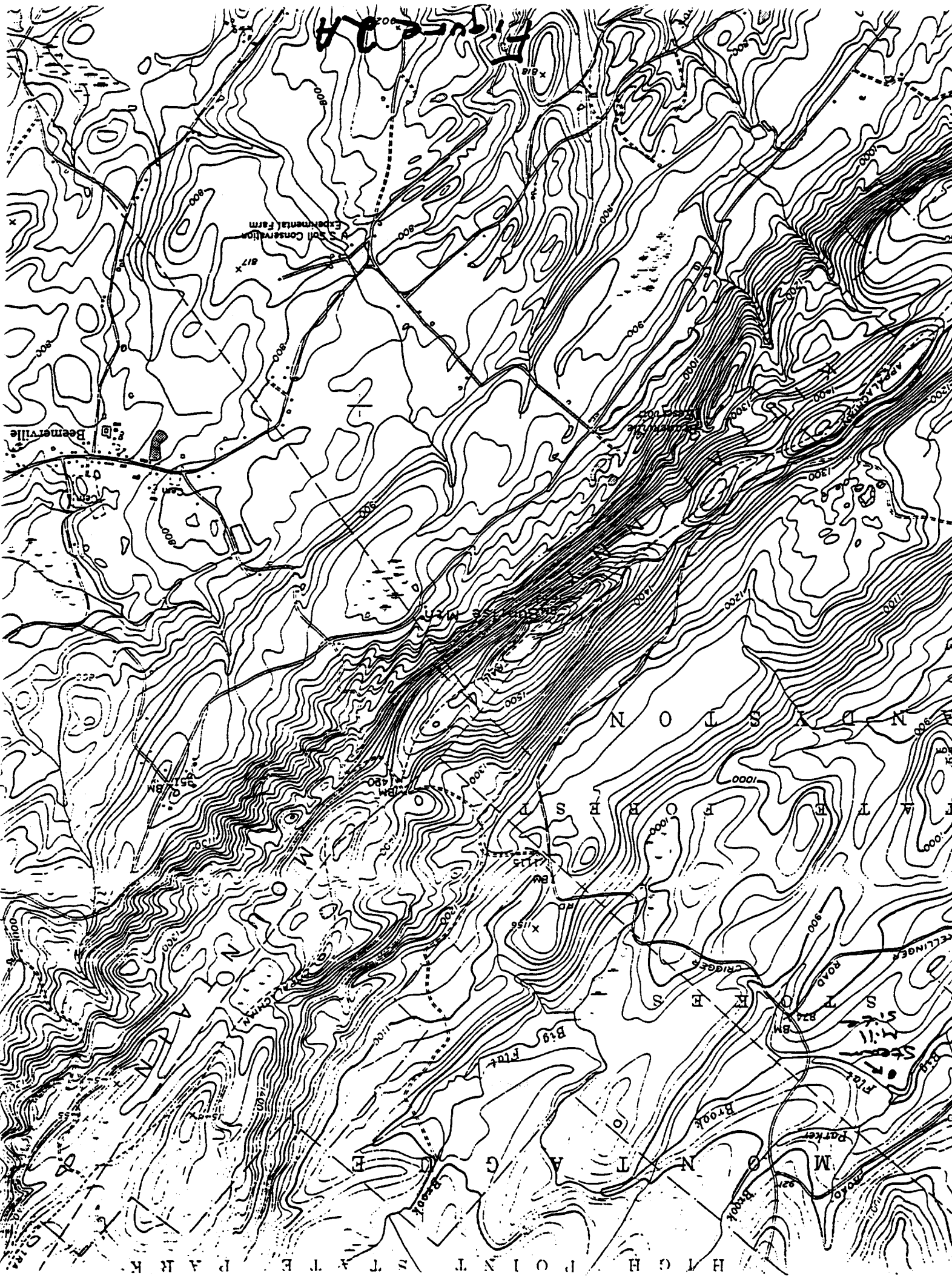
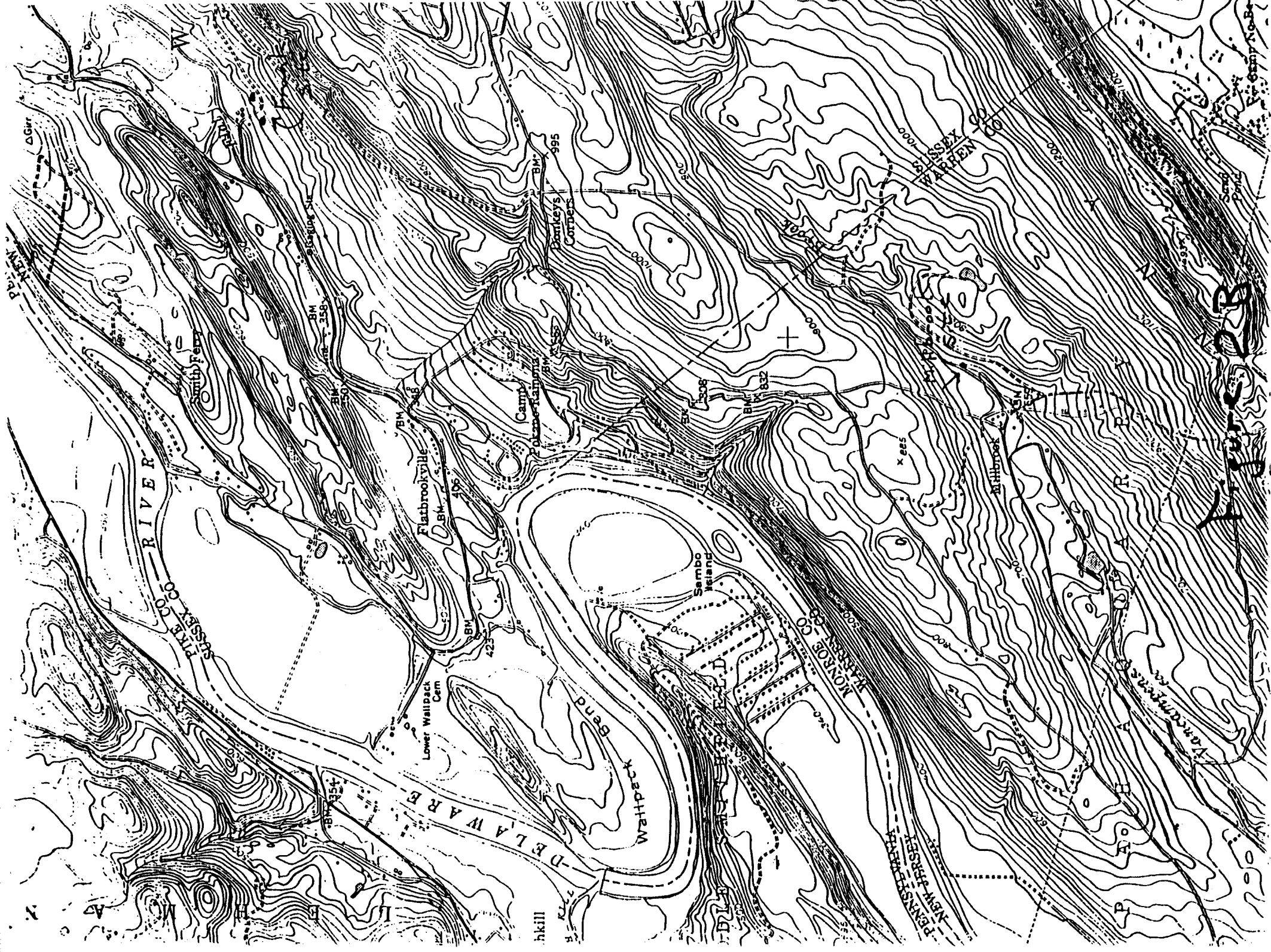
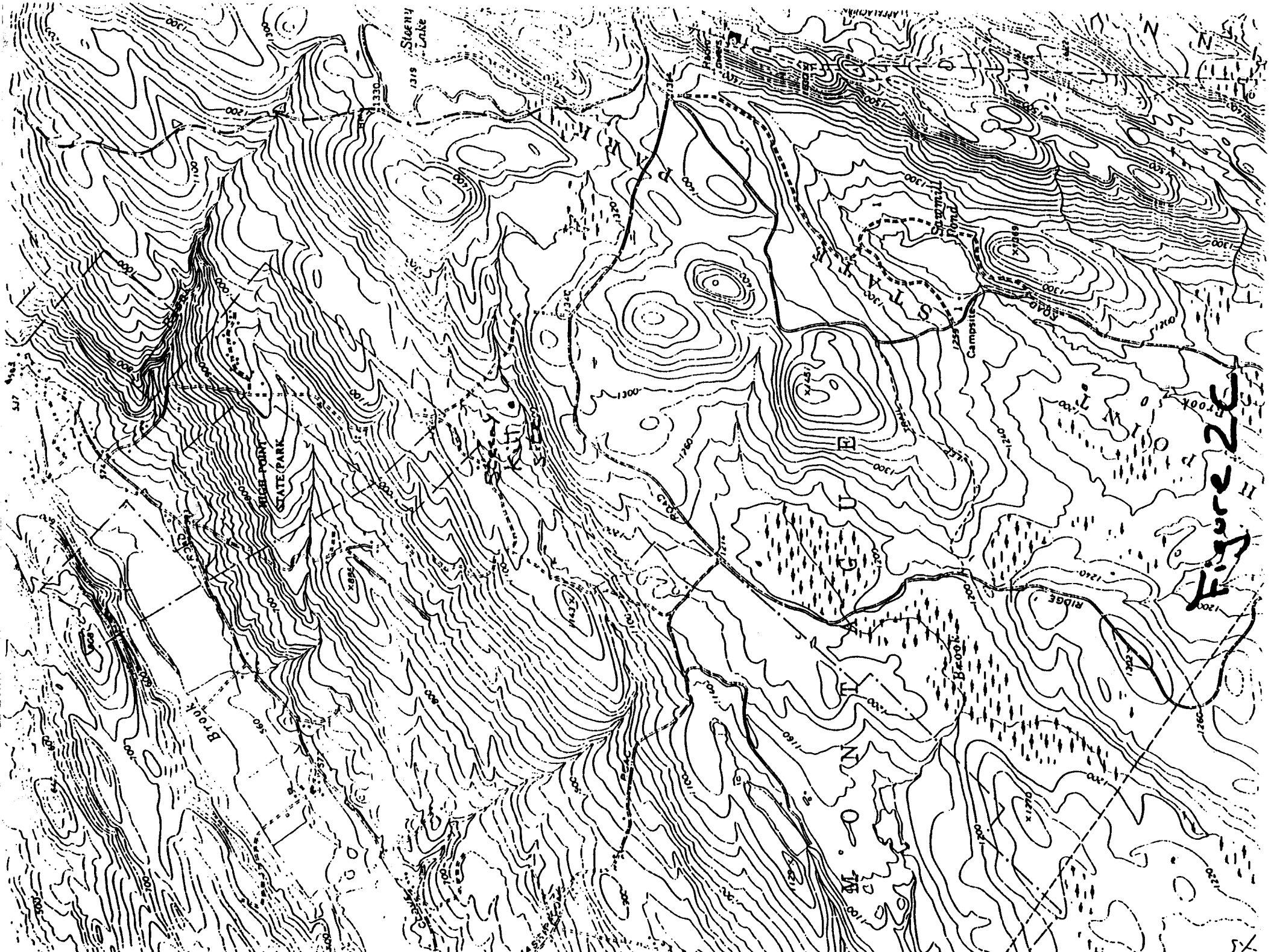




Figure 1D







June 24
1964



1:24,000
ALE 1:24,000
6066 III SW
1:24,000 (V.L.)

Figure 2D

ROAD CLASSIFICATION

• INTERIOR GEOLOGICAL SURVEY, RESTON, VIRGINIA 22199
1:24,000 FEET (N.J.)