

Appendix 1: Pictures of trap design.

A



B



C



(Figure 8) Pictures of trap design: (Figure 8A) shows the pitfall trap in the ground with lid and cage protecting the trap. (Figure 8B) shows the bait hanger with the mouse bait attached from the corner with copper tape around the points where it is held. (Figure 8C) Shows the bait hanger over the trap with cage and lid over the top.

Appendix 2: Indicator Species Analysis showing Silphidae response to soil type.

Species	Cluster	Indicator value	Probability
<i>Nicrophorus investigator</i>	Sandy	0.8198	0.003
<i>Nicrophorus humator</i>	Sandy	0.6680	0.007
<i>Thanatophilus sinuatus</i>	Sandy	0.4433	0.048

Appendix 2 shows that *Nicrophorus investigator*, *Nicrophorus humator* and *Thanatophilus sinuatus* were all significantly associated with sandy soils. This analysis wasn't included in the main text as the experimental design was not balanced for soil type. Soil appears to be an important factor for Silphidae beetles possibly due to their body size and how they can bury carcasses into the soil. *N. investigator* (12 - 22 mm) and *N. humator* (18 - 26 mm) are both large species and can bury carrion into the harder sandy soils whereas *N. vespilloides* may not be able to.

Appendix 3: Count Data for each site type for each family

Table 5

Site Type	<i>Nicrophorus vespilloides</i>	<i>Nicrophorus vespillo</i>	<i>Nicrophorus humator</i>	<i>Nicrophorus investigator</i>	<i>Nicrophorus interruptus</i>	<i>Silpha atrata</i>	<i>Thanatophilus sinuatus</i>	<i>Thanatophilus rugosus</i>	<i>Oiceoptoma thoracicum</i>
Broadleaf Woodland	1747	2	37	26	5	28	0	0	50
Conifer Woodland	1511	6	49	49	0	48	0	3	133
Unforested	1492	408	42	117	1	7	569	216	27

Table 5 shows how many species of Silphidae were caught from each habitat type. It shows that *Nicrophorus vespilloides* was by far the most abundant in each habitat type but was fairly even across the three site types. *Nicrophorus vespillo* only had 8 specimens caught in the forested sites but 408 from the unforested. *Nicrophorus humator* was even across the habitat types while *Nicrophorus investigator* was more abundant in the unforested site type than in any other. *Silpha atrata* was most abundant in the conifer woodland. *Thanatophilus sinuatus* was only caught in the unforested site type with *Thanatophilus rugosus* only having 3 specimens caught in the forested sites. *Oiceoptoma thoracicum* was most abundant in the conifer woodland but was found in the unforested site type.

Table 6

Site Type	<i>Sciodrepoides watsoni</i>	<i>Sciodrepoides fumatus</i>	<i>Catops morio</i>	<i>Catops grandicollis</i>	<i>Catops fuscus</i>	<i>Catops coracinus</i>	<i>Catops kirbii</i>	<i>Catops tristis</i>
Broadleaf Woodland	873	324	787	43	149	134	22	159
Conifer Woodland	629	338	804	29	185	161	36	204
Unforested	514	12	203	12	16	13	15	8
	<i>Catops longulus</i>	<i>Catops nigrita</i>	<i>Catops chrysomeloides</i>	<i>Catops fuliginosus</i>	<i>Nargus velox</i>	<i>Choleva lederiana</i>	<i>Choleva agilis</i>	<i>Choleva glauca</i>
Broadleaf Woodland	13	9	2	20	38	26	47	0
Conifer Woodland	22	6	4	13	21	26	31	1
Unforested	8	3	3	1	0	0	0	0

Table 6 shows how many species of Leiodidae were caught from each habitat type. *Sciodrepoides watsoni*, *Catops kirbii*, *Catops longulus*, *Catops nigrita*, *Catops chrysomeloides* & *Choleva glauca* were all similar with all but *Sciodrepoides watsoni* being because of low catch numbers. The rest of the Leiodidae showed a strong forested habitat bias with many more being caught there.

Appendix 4: Count data for each month for each family.

Table 7

Month	<i>Nicrophorus vespilloides</i>	<i>Nicrophorus vespillo</i>	<i>Nicrophorus humator</i>	<i>Nicrophorus investigator</i>	<i>Nicrophorus interruptus</i>	<i>Silpha atrata</i>	<i>Thanatophilus sinuatus</i>	<i>Thanatophilus rugosus</i>	<i>Oiceoptoma thoracicum</i>
May	810	114	55	2	0	8	201	14	20
June	994	142	19	1	1	18	184	88	77
July	878	70	1	71	1	42	46	64	22
August	1057	78	18	66	3	6	66	15	68
September	1174	91	33	59	0	2	78	29	11

From this data you can see *Nicrophorus vespilloides* is the most abundant throughout the month. *Nicrophorus vespillo* was more active in May and June than latter months whereas *Nicrophorus investigator* was the opposite of this and was more active in July, August and September.

Table 8

Month	<i>Sciodrepoides watsoni</i>	<i>Sciodrepoides fumatus</i>	<i>Catops morio</i>	<i>Catops grandicollis</i>	<i>Catops fuscus</i>	<i>Catops coracinus</i>	<i>Catops kirbii</i>	<i>Catops tristis</i>
May	496	86	318	19	68	90	9	88
June	324	96	473	24	97	50	11	78
July	498	105	313	10	65	53	15	19
August	387	19	325	3	63	52	24	29
September	279	121	356	26	41	49	14	147

	<i>Catops longulus</i>	<i>Catops nigrita</i>	<i>Catops chrysomeloides</i>	<i>Catops fuliginosus</i>	<i>Nargus velox</i>	<i>Choleva lederiana</i>	<i>Choleva agilis</i>	<i>Choleva glauca</i>
May	8	5	4	11	5	9	11	0
June	7	2	3	2	19	8	11	1
July	6	1	0	4	6	19	38	0
August	11	7	1	14	51	13	18	0
September	5	1	1	2	8	4	5	0

From this table you can see there were lots of species with relatively low numbers with *Sciodrepoides watsoni* having the highest total numbers across all months. Most were even across the months with *Catops tristis* showing a large rise in abundance in September.