

Isanda CoronerDate : 21.11.85

No	Size (mm)	wt + sleeve	wt of paper	wt - sleeve + paper	wt - tissue	wt - sleeve	wt - tissue
1	4.3	23.17	<del>3.25</del> <del>3.16</del>	5.26	1.97	21.2	0.09
2	4.6	25.73	<del>3.16</del> <del>3.34</del>	6.34	3.18	22.55	0.14
3	4.5	22.14	<del>3.34</del> <del>3.15</del>	<del>6.41</del> <del>3.15</del>	3.07	19.07	0.16
4	4.6	24.75	<del>3.15</del> <del>3.27</del>	6.10	2.95	21.8	0.13
5	2.7	4.42	<del>3.27</del> <del>3.07</del>	3.82	0.55	3.87	0.14
6	4.6	25.29	<del>3.07</del> <del>3.16</del>	5.58	2.51	22.78	0.11
7	4.4	22.82	<del>3.16</del> <del>3.12</del>	5.69	2.53	20.29	0.13
8	3.6	10.89	<del>3.12</del> <del>3.25</del>	4.65	1.43	9.46	0.15
9	4.1	18.12	<del>3.25</del> <del>3.19</del>	4.80	1.55	16.57	0.09
10	4.6	26.16	<del>3.19</del> <del>3.08</del>	6.34	3.15	23.01	0.14
11	2.1	1.89	<del>3.08</del> <del>3.12</del>	3.32	0.24	1.65	0.15
12	2.0	1.96	<del>3.12</del> <del>3.16</del>	3.38	0.26	1.7	0.15
13	3.0	6.38	<del>3.16</del> <del>2.34</del>	3.65	0.69	5.69	0.12
14	2.6	4.60	<del>2.34</del> <del>3.03</del>	3.43	0.49	4.11	0.12
15	5.2	44.98	<del>3.03</del> <del>2.97</del>	6.34	3.31	41.67	0.08
16	4.3	22.35	<del>2.97</del> <del>3.21</del>	5.12	2.15	20.2	0.11
17	3.2	9.19	<del>3.21</del> <del>3.01</del>	4.01	0.8	8.39	0.109
18	3.9	17.39	<del>3.01</del> <del>3.05</del>	4.66	1.65	15.74	0.10
19	3.1	7.85	<del>3.05</del> <del>3.00</del>	3.81	0.76	7.09	0.11
20	3.5	9.83	<del>3.00</del> <del>3.15</del>	4.06	1.06	8.77	0.12
21	2.6	4.20	<del>3.15</del> <del>2.35</del>	3.61	0.46	3.74	0.12
22	1.8	1.39	<del>2.35</del> <del>3.09</del>	3.10	0.15	1.24	0.12
23	1.9	1.54	<del>3.09</del> <del>3.07</del>	3.23	0.14	1.4	0.10
24	2.2	2.40	<del>3.07</del> <del>3.31</del>	3.31	0.24	2.16	0.11

✓  
Github

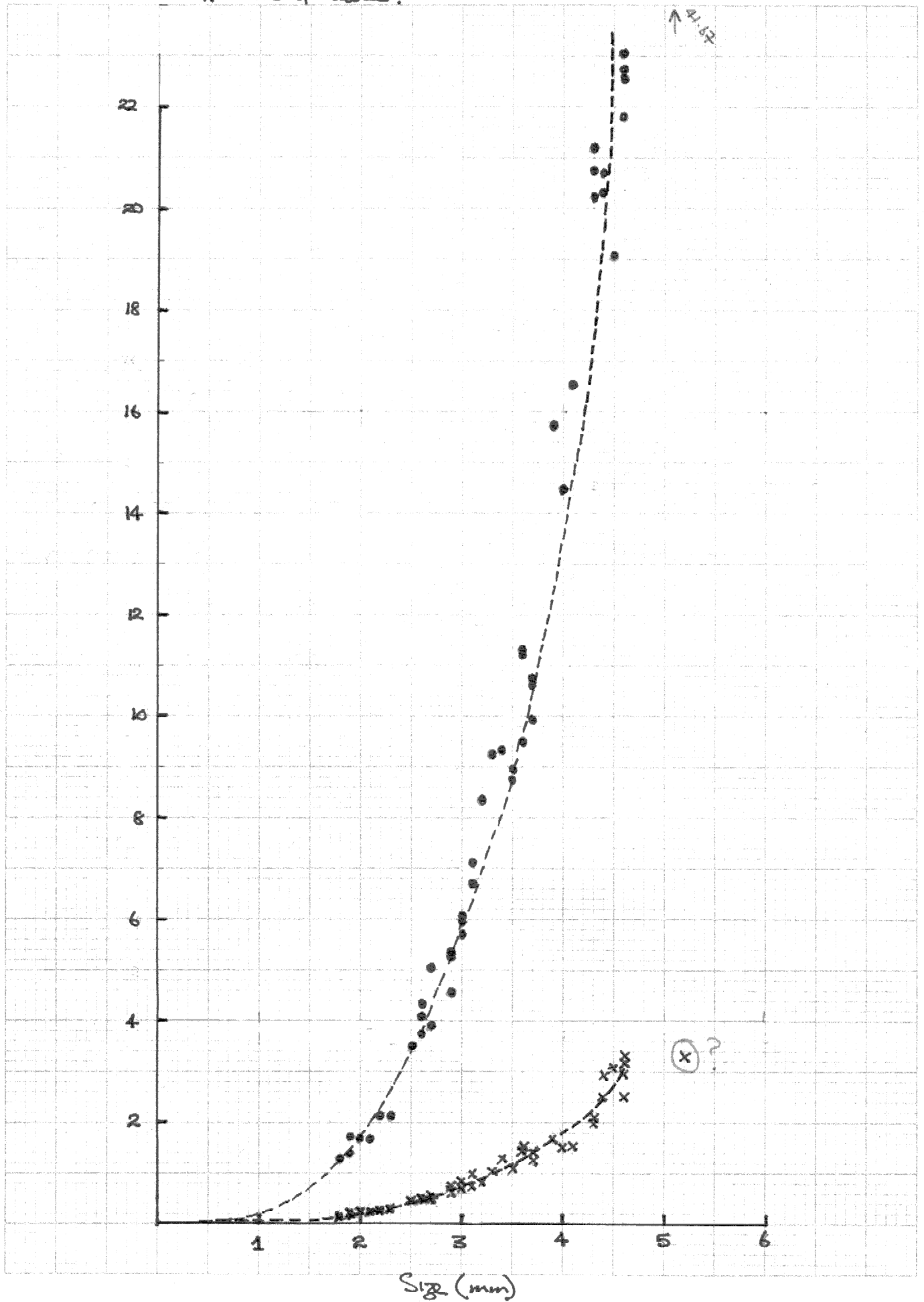
Isanda coronata

Date: 21.11.85

(mg)							
No	Size (mm)	Wt + shell	Wt of paper	Wt - shell + paper	Wt - tissue	Wt - shell	ratio $\frac{\text{tissue}}{\text{shell}}$
25	2.9	5.86	<del>3.21</del> 3.01	3.85	0.64	5.22	0.12
26	3.3	10.32	<del>3.61</del> 3.15	4.07	1.06	9.26	0.11
27	3.7	11.21	<del>3.63</del> 2.94	4.41	1.26	9.95	0.12
28	4.4	23.65	<del>6.55</del> 3.29	5.89	2.95	20.7	0.14
29	3.6	12.76	<del>6.42</del> 3.08	4.83	1.54	11.22	0.14
30	2.6	4.87	<del>6.77</del> 3.08	3.56	0.48	4.39	0.11
31	2.7	4.36	<del>6.60</del> 2.99	3.55	0.47	3.89	0.12
32	3.7	11.94	<del>6.76</del> 3.35	4.28	1.29	10.65	0.12
33	4.0	15.91	<del>6.79</del> 3.16	4.84	1.49	14.42	0.10
34	3.0	6.68	<del>6.60</del> 3.17	3.85	0.69	5.99	0.11
35	3.4	10.64	<del>7.52</del> 3.04	4.46	1.29	9.35	0.14
36	2.2	2.90	<del>7.99</del> 3.08	3.28	0.24	2.16	0.11
37	3.5	10.13	<del>6.29</del> 3.04	4.25	1.17	8.96	0.13
38	3.7	12.22	<del>6.77</del> 3.10	4.49	1.45	10.77	0.13
39	2.7	5.49	<del>6.19</del> 3.02	3.57	0.47	5.02	0.09
40	4.3	22.88	<del>6.62</del> 3.30	5.12	2.1	20.78	0.10 pin hole in shell.
41	2.5	3.93	<del>6.64</del> 3.04	3.76	0.46	3.47	0.13
42	3.6	12.96	<del>6.46</del> 3.10	4.69	1.65	11.31	0.15
43	3.0	6.86	<del>4.93</del> 2.91	3.94	0.84	6.02	0.14
44	2.3	2.45	<del>6.59</del> 2.98	3.19	0.28	2.17	0.13
45	1.9	1.94	<del>6.18</del> 2.92	3.19	0.21	1.73	0.12
46	3.1	7.71	<del>6.61</del> 3.08	3.92	1.00	6.71	0.15
47	2.9	5.22	<del>6.39</del> 2.88	3.74	0.66	4.56	0.14
48	2.9	6.14	<del>6.55</del>	3.65	0.77	5.37	0.14

Note: Tare set with 10 weight (silver). ??

• - wt of shell  
 x - wt of tissue.



Isanda coronata - size : weight relationship.

Data : a) size - length across longest axis through umbilus.



b) weight - dry weight + shell  
- dry weight - shell

Method : 1) Animals cleaned of adhering sand etc

2) Dried at 60°C

3) Weighed on caln

4) Measured with ocular micrometer

5) Shell dissolved in 2.5% HCl

~~6) Peristome removed and tissue placed on filter paper.~~  
Placed on filter dishes. wt includes {peristome  
operculum.

7) Dried at 60°C

8) Reweighed.

Analysis

Plot of size vs wt shell and wt tissue shows power curve.

Fit linear regression to obtain initial estimates of eqn parameters on transformed data

Ratio of wt tissue vs wt shell appears to show no correlation with size. ∴ if shell wt is a good estimator of effort req. to handle prey then there is no difference in cost/benefit ratio for different sizes. Need to determine shell thickness to confirm.

also need to know :

- a) foraging activity  $\rightarrow$  time available for consumption
- b) amount consumed vs size of prey
- c) No of prey that can be caught in a single foraging period.
- d) Probability of escape during duelling. i.e. some prey items have been found with perforated duelling holes.