

APPENDIX 2. RESULTS OF ANALYSES OF VARIANCE TESTING FOR DIFFERENCES AMONGST DUGONG POPULATION ESTIMATES FROM DIFFERENT SURVEYS OF CLEVELAND BAY AND HINCHINBROOK SURVEY BLOCKS.

Results are presented without covariates (1) and with survey conditions included as a covariate.

1. Dugongs. Block 1 (Cleveland Bay) Seven surveys

Source of variation	d.f		<i>F</i>		<i>P</i>	
	1	2	1	2	1	2
Survey	6	6	2.67	2.21	0.020	0.049
Transect	15	15	9.34	9.01	0.000	0.000
Residual	90	88				
Regression		2		0.35		0.706

2. Dugongs. Block 2 (Hinchinbrook) version 1 transects - three surveys

Source of variation	d.f		<i>F</i>		<i>P</i>	
	1	2	1	2	1	2
Survey	2	2	3.60	0.130	0.034	0.879
Transect	26	26	3.14	2.60	0.000	0.002
Residual	52	50				
Regression		2		0.10		0.907

3. Dugongs. Block 2 (Hinchinbrook) ver. 2 transects - five surveys

Source of variation	d.f		<i>F</i>		<i>P</i>	
	1	2	1	2	1	2
Survey	4	4	1.11	3.84	0.356	0.006
Transect	23	23	14.29	15.32	0.000	0.000
Residual	92	90				
Regression		2		7.97		0.001

4. Dugongs. Blocks 1 and 2 (version 2 transects) four surveys

Source of variation	d.f		<i>F</i>		<i>P</i>	
	1	2	1	2	1	2
Transect nested in Block ¹	38	38	7.81	8.06	0.000	0.000
Block ²	1	1	0.06	0.00	0.815	0.958
Survey ¹	3	3	3.17	5.38	0.027	0.002
Block by Survey ¹	3	3	1.83	0.23	0.146	0.879
Residual	114	112				
Regression ¹		2		3.65		0.029

¹ Tested against residual

² Tested against Transect nested in Block