

SECTION 2

Raw data tables for dugongs in the survey area from Cape Bedford  
south to Bustard Head

Section 2: Raw data table for dugongs in the survey area from Cape Bedford south to Bustard Head.

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TABLE 1: Details of weather conditions encountered during the surveys.

Date	Session	Wind		Cloud		Beaufort Sea State mode(range)	North/East mode(range)	Clare*		Tide Time
		Speed (knots)	Direction	Cover (oktas)	Height (ft)			South/West mode(range)		
(a) Northern Central Section, September 1986										
22/09/86	1	0	-	2	1000	1.0(0.0-3.0)	1.0(0.0-2.0)	0.0(0.0-2.0)		High 1131 <sup>a</sup>
	2	6	SE	0	-	1.0(1.0-2.0)	2.0(1.0-2.0)	0.0(0.0-1.0)		Low 1622 <sup>a</sup>
23/09/86	1	<5	V	0	-	1.0(0.0-2.5)	1.0(0.0-2.0)	0.0(0.0-1.0)		Low 0358 <sup>a</sup>
	2	10	E	1	3000	1.0(0.0-2.0)	1.0(0.0-2.0)	0.0		High 1525 <sup>c</sup>
24/09/86	1	2	N	1	2500	1.0(1.0-2.0)	1.0(0.0-3.0)	0.0(0.0-3.0)		Low 0811 <sup>b</sup>
	2	7	NE	2,2	3000,4000	1.0(1.0-2.0)	2.0(1.0-3.0)	0.0		High 1733 <sup>b</sup>
(b) Central Section, September - October 1987										
29/09/87	1	10	ESE	2	2000	2.0(0.0-3.0)	1.0(0.0-2.0)	0.0		Low 0657 <sup>b</sup>
	2	8	E	0	-	1.0(1.0-3.0)	2.0(1.0-2.0)	0.0		High 1548 <sup>b</sup>
	3	0	-	0	-	3.0(1.0-3.0)	1.0-2.0(0.0-2.5)	0.0(0.0-1.0)		
30/09/87	1	0	-	1	1500	0.5(0.0-1.0)	1.0(0.0-2.0)	0.0(0.0-1.0)		High 0413 <sup>h</sup>
	2	0	-	3	3000	1.0(0.0-2.0)	2.0(1.0-2.5)	0.0(0.0-1.0)		Low 1008 <sup>h</sup>
	3	5	W	0	-	2.0(0.0-3.0)	1.0(0.0-2.0)	0.0(0.0-1.0)		High 1708 <sup>h</sup>
1/10/87	1	0	-	1,1	2500,20000	0.0(0.0-1.0)	0.0(0.0-1.0)	0.0		Low 0430 <sup>b</sup>
	2	0	-	1	2500	1.0(0.0-3.0)	2.0(1.0-3.0)	0.0(0.0-1.0)		High 1030 <sup>b</sup>
5/10/87	1	0	-	3	1500	1.0(1.0-3.0)	1.0(0.0-2.0)	0.0(0.0-2.0)		High 0723 <sup>b</sup>
6/10/87	1	0	-	0	-	0.0(0.0-1.0)	1.0(0.0-2.0)	0.0		High 0804 <sup>b</sup>
	2	0	-	0	-	1.0(0.0-1.0)	2.0(0.0-3.0)	0.0		Low 1413 <sup>b</sup>
	3	8	SE	0	-	2.0(0.0-3.0)	2.0(1.0-2.5)	0.0(0.0-1.0)		
7/10/87	1	0	-	2	1000	0.0(0.0-1.5)	0.0(0.0-1.0)	0.0		High 0844 <sup>b</sup>
	2	8	E	2	1500	0.5(0.0-3.0)	3.0(1.0-3.0)	0.0(0.0-1.0)		Low 1453 <sup>b</sup>
21/10/87 <sup>k</sup>	1	0	-	0	-	0.0(0.0-2.0)	1.0(0.0-2.0)	1.0(0.0-1.0)		High 0753 <sup>b</sup>
(c) Mackay/Capricorn Section, November 1986										
18/11/86	1	10	N	4	2500	2.0(0.0-3.0)	1.0(0.0-2.0)	1.0(0.0-2.0)		High 1139 <sup>d</sup>
21/11/86	1	5	S	0	-	1.0-3.0	1.5(0.0-2.0)	1.5(0.0-2.0)		Low 0648 <sup>d</sup>
	2	10	E	0	-	2.0(0.0-3.0)	1.0(1.0-2.0)	1.0(0.0-2.0)		High 1317 <sup>d</sup>
22/11/86	1	5	S	0	-	1.0(0.0-1.0)	1.0(0.0-2.0)	1.0(0.0-2.0)		Low 0552 <sup>e</sup>
	2	0	-	0	-	2.0(1.0-3.0)	2.0(1.0-2.5)	2.0(1.0-2.0)		High 1252 <sup>e</sup>
23/11/86	1	5	SE	3	2000	0.0-1.0	0.0(0.0-2.0)	1.0(0.0-2.0)		Low 0658 <sup>f</sup>
	2	5	E	0	-	2.0(0.0-3.0)	2.0(1.0-2.0)	2.0(1.0-2.0)		High 1338 <sup>g</sup>
24/11/86	1	0	-	1	2000	0.0(0.0-1.0)	0.0(0.0-1.0)	0.0(0.0-1.0)		Low 1006 <sup>d</sup>
	2	10	NE	0	-	1.0(0.0-3.0)	2.0(1.0-2.0)	2.0(1.0-2.0)		High 1623 <sup>h</sup>
5/11/86	1	5-10	E	3	3500		1.0(0.0-2.0)	0.0-2.0		Low 1209 <sup>i</sup>
26/11/86	1	15	ESE	4	2500	3.0(3.0-4.0)	2.0	1.0-2.0		High 0650 <sup>h</sup>
27/11/86	1	5	SE	0	-	0.0-1.0	0.0(0.0-1.0)	1.0(0.0-2.0)		High 0747 <sup>h</sup>
(d) Cairns Section, October 1987										
12/10/87	1	0	-	0	-	1.0(0.0-2.5)	1.0(0.0-2.0)	1.0(0.0-2.0)		High 0854 <sup>j</sup>
	2	10-15	E	0	-	0.0(0.0-1.0)	0.0(0.0-2.0)	0.0(0.0-1.0)		Low 1513 <sup>j</sup>
13/10/87	1	0	-	0	-	0.0(0.0-2.0)	0.0(0.0-1.0)	0.0(0.0-1.0)		High 0940 <sup>j</sup>
	2	5	N	3	3500	0.0(0.0-2.0)	0.0(0.0-1.0)	0.0		Low 1558 <sup>j</sup>
	3	10-15	E	2	3500	1.0(0.0-1.0)	0.0(0.0-1.0)	0.0		
14/10/87	1	5	N	2	2500	1.0(0.0-2.0)	1.0(0.0-3.0)	0.0(0.0-2.0)		High 1032 <sup>j</sup>
	2	10	ENE	1	2000	1.0(1.0-2.5)	2.0(0.0-2.5)	1.0(0.0-2.0)		Low 1648 <sup>j</sup>
15/10/87	1	8-10	E	3	1500	1.0(1.0-3.0)	1.0(0.0-2.0)	1.0(0.0-2.0)		Low 0637 <sup>j</sup>
	2	12	E	4	1500	3.0(1.0-3.0)	2.0(0.0-3.0)	2.0(0.0-2.0)		High 1134 <sup>j</sup>

TABLE 1: continued.

Date	Session	Wind Speed Direction (knots)	Cloud Cover Height (oktas) (ft)	Beaufort Sea State mode(range)	North/East mode(range)	Glare South/West mode(range)	Tide Time
(d) Cairns Section, October 1987							
16/10/87	1	10 SE	1 6000	1.5(0.0-2.0)	1.0(0.0-2.0)	1.0(0.0-2.0)	Low 0806 <sup>j</sup>

\* Scale: 0 = no glare, 1 = 0  $\leq$  25% field of view glare affected, 2 = 25  $\leq$  50%, 3 = > 50%

<sup>a</sup> Lucinda

<sup>b</sup> Townsville

<sup>c</sup> Missionary Bay (Lucinda +40 mins on high and low waters)

<sup>d</sup> Shoalwater Bay (Mackay Outer Harbour -12 mins on high and low waters)

<sup>e</sup> Gladstone Harbour

<sup>f</sup> The Narrows (Gladstone Harbour +45 mins on high water; +55 mins on low water)

<sup>g</sup> Great Kepple Island (Gladstone Harbour +5 mins on high water; +3 mins on low water)

<sup>h</sup> Mackay Outer Harbour

<sup>i</sup> Flock Pigeon Island (Mackay Outer Harbour +25 mins on high and low waters)

<sup>j</sup> Cairns.

<sup>k</sup> transects flown on 21/10/87 are replicates of transects flown on 5/10/87 and subsequently abandoned due to poor weather conditions.

TABLE 2: Beaufort Sea State and glare (for the north/east and south/west sides of the aircraft) for each transect.

Scale : 0 = no glare

1 =  $0 \leq 25\%$  field of view glare affected

2 =  $25 \leq 50\%$  field of view glare affected

3 =  $> 50\%$  field of view glare affected

(a) Central Section

Transect No.	Beaufort Sea State mode(range)	Glare	
		North/East mode(range)	South/West mode(range)

(a) Northern Central Section, September 1986

001	1.0-2.0	2.0	0.0
002	1.0	2.0	0.0
003	2.0(1.0-2.0)	2.0	0.0
004	1.0	2.0-2.5	0.0
005	2.0(1.0-2.0)	2.0	0.0
006	1.0(1.0-1.5)	1.0-2.0	0.0
007	1.0	0.0-1.0	0.0
008	1.0	1.0	0.0
009	1.0(1.0-2.0)	0.0	2.0-3.0
010	1.0	2.0	0.0
011	1.0	0.0-1.0	0.0-1.0
012	1.0	1.0	0.0
013	1.5(1.0-2.0)	2.0(1.0-3.0)	0.0(0.0-1.0)
014	1.5(1.0-2.0)	1.0	0.0
015	1.5(1.0-2.0)	1.0(0.0-1.0)	0.0
016	1.5(1.0-2.0)	2.0(1.0-2.0)	0.0(0.0-1.0)
017	1.0(0.5-2.0)	2.0	1.0
018	1.0(0.0-2.0)	1.0	0.0
019	1.0(0.0-1.0)	1.0-2.0	0.0
020	1.0(0.0-2.0)	1.0	0.0
021	1.0	1.0-2.0	0.0
022	1.0	0.0-1.0	0.0
023	1.0(1.0-2.0)	1.0-2.0	0.0
024	1.0(1.0-2.0)	2.0	0.0
025	1.0(1.0-2.0)	1.0	0.0
026	1.0(1.0-2.0)	1.0	0.0
027	2.0	2.0(1.0-2.0)	0.0(0.0-1.0)
028	2.0	1.0	0.0
029	1.0-2.0	2.0	1.0
030	1.0	1.0-2.0	0.0
031	1.0	1.0-2.0	0.0-1.0
032	1.0	2.0	0.0
033	1.0	2.0	0.0
034	1.0(1.0-2.5)	2.0	0.0
035	2.0(1.0-2.0)	1.0-2.0	0.0
036	2.0	2.0	0.0
037	2.0	2.0	0.0
038	2.0(1.0-2.5)	2.0	0.0
039	2.5(0.0-3.0)	1.0	0.0
040	2.0(0.0-2.0)	1.0(1.0-2.0)	0.0
041	1.0(0.0-2.0)	0.0-1.0	0.0
042	1.0(0.0-1.0)	1.0(0.0-2.0)	0.0
043	1.0(0.0-1.0)	2.0	0.0(0.0-1.0)
044	1.0	1.0-2.0	0.0
045	0.0	1.0	1.0
046	0.0-1.0	1.0	0.0-0.5

TABLE 2: continued.

## (a) Central Section

Transect	Beaufort Sea	Glare	
No.	State	North/East	South/West
	mode(range)	mode(range)	mode(range)
(a) Northern Central Section, September 1986			
047	0.0(0.0-1.0)	1.0	1.0
048	1.0(0.0-1.0)	2.0(1.0-2.0)	1.0
049	1.0	1.0-2.0	1.0(1.0-2.0)
050	1.0	1.0	1.0(0.0-1.0)
051 <sup>a</sup>	1.0(0.0-1.0)	0.0-1.0	0.0
052 <sup>a</sup>	1.0(0.0-2.0)	1.0-2.0	0.0
053 <sup>a</sup>	1.0	1.0	0.0
054 <sup>a</sup>	1.0	1.0	0.0
055 <sup>a</sup>	1.0	1.0-2.0	0.0
056 <sup>a</sup>	1.0	1.0	0.0
057 <sup>a</sup>	1.0	2.0	0.0
058 <sup>a</sup>	1.0	1.0	0.0
059	1.0(1.0-2.0)	0.0-2.0	0.0-1.0
060	1.0	2.0	0.0
061	1.0(0.0-1.0)	1.0	0.0
062	1.0	1.0-2.0	0.0
063	2.0(0.0-2.0)	1.0(1.0-2.0)	0.0

<sup>a</sup> These transects flown north/south, hence glare is for east/west sides of the aircraft.

TABLE 2: continued

## (a) Central Section

Transect No.	Beaufort Sea	Glare	
	State mode(range)	North/East mode(range)	South/West mode(range)

## (b) Northern Central Section, October 1987

101	0.5	1.0	1.0
102	1.0	1.0	0.0
103	1.0	1.0	1.0
104	0.0(0.0-1.0)	1.0	1.0
105	1.0(0.0-2.0)	0.0-1.0	0.0-1.0
106	1.0-2.0(1.0-2.5)	1.0	1.0
107	0.0(0.0-0.5)	0.0	1.0
108	no data recorded	0.0-1.0	0.0
109	1.5(1.0-1.5)	1.0-2.0	1.0
110	1.5	2.0	1.0
111	1.0(1.0-2.5)	1.0	0.0
112	1.0	1.0	0.0
113	1.0(1.0-2.0)	1.0	0.0
114	1.0	2.0	1.0
115	1.0(1.0-2.0)	1.0	0.0
116	2.0(0.5-3.0)	2.5(1.0-2.5)	0.0(0.0-1.0)
117	2.0-2.5(0.0-2.5)	2.0(1.0-2.0)	0.0
118	1.0(0.0-1.0)	2.0-2.5(0.0-2.5)	0.0
119	0.0(0.0-0.5)	1.0	0.0
120	0.0(0.0-0.5)	0.0-1.0	0.0
121	0.0(0.0-0.5)	0.0	0.0
122	0.5	1.0	0.0
123	0.0-0.5	0.0	0.0
124	1.0(0.5-1.0)	1.0-2.0	0.0
125	1.0	2.5	0.0
126	0.5-1.5	2.0	0.0
127	0.5(0.5-1.0)	2.0	0.0
128	0.0-1.0	2.0-3.0	0.0
129	1.0	2.0	0.0
130	1.0(0.0-1.0)	0.0-1.0	0.0
131	2.0(2.0-3.0)	3.0	1.0
132	3.0(0.0-3.0)	3.0	1.0
133	2.0	3.0	0.0-1.0
134	2.5	3.0	1.0
135	1.0(0.5-1.0)	2.0-2.5	0.0
136	0.5(0.5-1.0)	2.0	0.0
137	0.0-1.0	2.0-2.5	0.0
138	1.0	0.0	0.0
139	0.5-1.0	0.0	0.0
140	0.5(0.0-1.0)	0.0	0.0
141	1.0(0.0-1.0)	0.0	0.0
142	1.0(0.0-1.0)	0.0	0.0
143	0.0-1.0	0.0	0.0
144	0.0(0.0-1.0)	0.0	0.0
145	0.5(0.0-1.0)	0.0(0.0-1.0)	0.0
146	0.0(0.0-0.5)	0.0	0.0
147	0.0(0.0-0.5)	0.0	0.0
148	0.0-0.5	0.0	0.0
149	0.0(0.0-1.0)	1.0	0.0
150	0.5(0.0-0.5)	0.0	0.0
151 <sup>a</sup>	0.0	1.0	0.0

TABLE 2: continued.

## (a) Central Section

Transect No.	Beaufort Sea State mode(range)	North/East mode(range)	Glare South/West mode(range)
(b) Northern Central Section, October 1987			
152 <sup>a</sup>	0.0(0.0-1.0)	1.0(1.0-2.0)	0.0
153 <sup>a</sup>	1.0	1.0	0.0
154 <sup>a</sup>	0.5	1.0-2.0	0.0
155 <sup>a</sup>	0.0-1.0	1.0	0.0
156 <sup>a</sup>	no data recorded	1.0-2.0	0.0
157 <sup>a</sup>	0.0	1.0	0.0
158 <sup>a</sup>	0.0	2.0	0.0
159	no data recorded	0.0	0.0
160	1.5(1.0-2.0)	1.0	1.0
161	0.0-1.0	0.0	0.0
162	0.0	0.0	0.0
163	0.5(0.0-1.0)	1.0-2.0	0.0

<sup>a</sup> These transects flown north/south, hence glare is for east/west sides of the aircraft.



TABLE 2: continued.

## (a) Central Section

Transect No.	Beaufort Sea	Glare	
	State mode(range)	North/East mode(range)	South/West mode(range)

## (c) Southern Central Section, September - October 1987

001	0.5(0.5-1.0)	1.0	0.0
002	1.0(0.0-1.0)	2.0	0.0
003	0.0-0.5	0.0	0.0
004	0.0-0.5	1.0	0.0
005	0.0(0.0-1.0)	0.0	0.0
006	1.0(0.5-2.0)	2.0	0.0
007	1.0(0.0-1.0)	1.0	0.0
008	0.0-1.0	1.0-2.0	0.0
009	no data recorded	no data recorded	no data recorded
010	0.0-0.5	1.0	0.0
011	0.0-1.0(0.0-2.0)	2.0	0.0
012	0.0-1.0	1.5(1.0-1.5)	0.0(0.0-1.0)
013	0.5-1.0(0.0-2.0)	2.0	0.0
014	1.0(0.0-1.0)	1.0-2.5	1.0(0.0-1.0)
015	1.0(1.0-2.0)	2.0	0.0
016	1.0-2.0(0.0-2.0)	2.0	0.0
017	1.0(0.0-1.0)	2.0	0.0
018	1.0-2.0(0.5-2.0)	2.0	0.0
019	1.0-2.0	2.0	0.0
020	2.0(0.0-2.5)	2.0	0.0
021	2.0(2.0-3.0)	1.0	0.0
022	2.0(2.0-2.5)	1.0(0.0-1.0)	1.0(0.0-1.0)
023	2.0(1.0-3.0)	1.0-2.0	0.0-1.0
024	3.0(1.0-3.0)	2.0-2.5	0.0-1.0
025	1.0-3.0	1.0	0.0-1.0
026	3.0(1.0-3.0)	2.0(0.0-3.0)	0.0-1.0
027	2.0(1.0-3.0)	1.0	0.0
028	1.0(1.0-1.5)	1.0-2.0	0.0
029	0.5(0.0-1.0)	1.0	0.0
030	0.5	2.0	0.0
031	1.0(0.5-1.0)	1.0	0.0-1.0
032	0.0(0.0-0.5)	1.0	0.0
033	0.5(0.5-1.0)	0.0-1.0	0.0
034	0.0(0.0-0.5)	1.0	0.0
035	0.5(0.5-1.0)	1.0	0.0
036	1.0	1.0	0.0
037	1.0	1.0	0.0
038	1.0	1.0	0.0
039	1.0(1.0-2.5)	2.0	0.0
040	2.0	2.0	0.0
041	1.0	2.0	0.0
042	3.0	2.0	0.0
043	3.0(2.0-3.0)	2.0	0.0
044	2.5(1.5-3.0)	2.0	0.0
045	2.0(2.0-3.0)	1.0	0.0
046	0.0(0.0-2.0)	1.0	0.0
047	1.0(0.0-2.0)	1.0	0.0
048	1.0	2.0	0.0
049	1.0-2.0	1.0	0.0
050	1.0(1.0-2.0)	0.0-1.0	0.0
051	1.0(1.0-2.5)	1.0	0.0

TABLE 2: continued.

## (a) Central Section

Transect No.	Beaufort Sea	Glare	
	State mode(range)	North/East mode(range)	South/West mode(range)

## (c) Southern Central Section, September - October 1987

052	2.0(2.0-3.0)	1.0	0.0
053	1.0	0.0	0.0
054	2.0(1.0-3.0)	1.0	0.0
055	2.0(2.0-3.0)	1.0	0.0
056	2.0(2.0-3.0)	1.0	0.0
057	2.0(2.0-3.0)	1.0	0.0
058	2.0-2.5(2.0-3.0)	1.0	0.0
059	0.0	0.0	0.0
060	0.0-1.0	0.0	0.0
061	0.0-0.5	0.0	0.0
062	0.0-1.0	0.0	0.0
063	0.5	1.0	0.0
064	0.0(0.0-0.5)	0.0	0.0
065	0.0(0.0-0.5)	1.0	0.0
066	0.0	0.0	0.0
067	0.0(0.0-1.0)	0.0	0.0
068	0.0	0.0	0.0
069	0.0	0.0	0.0
070	0.0	0.0	0.0
071	0.0	1.0	0.0
072	0.0	0.0	0.0
073	0.0(0.0-0.5)	1.0	0.0
074	0.0	0.0	0.0
075	1.0(0.0-1.0)	2.0	0.0
076	1.0(0.0-1.0)	1.0	0.0
077	1.0(1.0-2.0)	2.0	0.0
078	1.0(0.0-3.0)	1.0-2.0	0.0-1.0
079	2.0(1.0-2.0)	3.0(2.0-3.0)	1.0(0.0-1.0)
080	1.0(1.0-2.0)	1.0-2.0	0.0
081	3.0(1.0-3.0)	0.0-1.0	0.0
082	1.0-3.0	1.0	0.0
083	2.0(2.0-2.5)	1.0	1.0-2.0
084	2.0(1.0-3.0)	0.0	0.0

TABLE 2: continued.

(b) Mackay/Capricorn Section, November 1986

Transect No.	Beaufort Sea	Glare	
	State mode(range)	North/East mode(range)	South/West mode(range)
001	0.0-1.0	0.0-1.0	0.0-1.0
002	1.0(0.0-1.0)	1.0	1.0
003	1.0(0.0-1.0)	1.0	1.0
004	0.0(0.0-1.0)	1.0	1.0
005	1.0	1.0	1.0
006	1.0	1.0	1.0
007	1.0	1.0	1.0
008	0.0-1.0	1.0	2.0
009	0.0-1.0	1.0-2.0	1.0(1.0-2.0)
010	1.0(0.0-1.0)	2.0	2.0
011	1.0(0.0-1.0)	1.0-2.0	1.0-2.0
012	0.0-1.0	0.0-2.0	0.0-2.0
013	2.0(1.0-3.0)	2.0	2.0(1.0-2.0)
014	1.0(1.0-3.0)	2.0-2.5	2.0
015	2.0-3.0	2.0	2.0
016	3.0(2.0-3.0)	2.0	2.0
017	2.0(1.0-3.0)	2.0	2.0
018	1.0(0.0-3.0)	2.0	1.0
019	2.0-3.0(1.0-3.0)	1.0-2.0	1.0-2.0
020	1.0	0.0-2.0	0.0-2.0
021	1.0	1.0	0.0-2.0
022	1.0	2.0	2.0
023	1.0	2.0	2.0
024	1.0	2.0	2.0
025	1.0(0.0-1.0)	2.0	2.0
026	0.0-1.0	1.0(0.0-1.0)	1.0
027	0.0	0.0	1.0
028	0.0	0.0	0.0
029	0.0-1.0	1.0	1.0
030	0.0(0.0-1.0)	0.0	1.0
031	1.0(0.0-1.0)	1.0	1.0
032	0.0	0.0	0.0
033	0.0(0.0-1.0)	0.0-1.0	0.0-1.0
034	0.0(0.0-1.0)	0.0	0.0
035	3.0	2.0	2.0
036	1.0(1.0-3.0)	2.0	2.0
037	2.0-3.0	2.0	2.0
038	1.0-2.0	2.0	2.0
039	2.0(1.0-2.0)	2.0	2.0
040	2.0	2.0	2.0
041	2.0(1.0-2.0)	1.0(1.0-2.0)	2.0(1.0-2.0)
042	1.0(0.0-2.0)	2.0	2.0
043	1.0-2.0	2.0	2.0
044	1.0	2.0	2.0
045	2.0(1.0-2.0)	2.0	2.0
046	2.0	2.0	2.0
047	2.0	2.0	2.0
048	2.0	2.0	2.0
049	2.0(1.0-2.0)	1.0	0.0-1.0
050	2.0(0.0-2.0)	2.0	2.0
051	2.0(2.0-2.5)	1.0	1.0
052	2.0(1.0-3.0)	2.0	2.0

TABLE 2: continued.

(b) Mackay/Capricorn Section, November 1986

Transect No.	Beaufort Sea	Glare	
	State mode(range)	North/East mode(range)	South/West mode(range)
053	2.0(2.0-2.5)	2.0	2.0
054	2.0(1.0-3.0)	2.0	2.0
055	2.5(1.0-3.0)	2.0	1.0
056	1.0-2.5(1.0-3.0)	2.0	2.0
057	2.5(2.0-3.0)	2.0	2.0
058	3.0-3.5	1.0	2.0
059	1.0(1.0-2.0)	1.0	1.0
060	2.0(1.0-3.0)	1.0	1.0
061	2.0(1.0-3.0)	1.0	1.0-2.0
062	2.0-2.5(2.0-3.0)	1.0	1.0
063	2.5	1.0	2.0
064	2.5(2.5-3.0)	2.0	1.0
065	2.0(2.0-2.5)	1.0	1.0
066	2.0(1.0-3.0)	1.0	1.0
067	2.0(1.5-2.0)	0.0(0.0-1.0)	2.0(0.0-2.0)
068	2.0(1.0-2.0)	1.0-2.0	1.0
069	1.0(1.0-2.0)	0.0(0.0-1.0)	1.0(0.0-1.0)
070	1.0(1.0-2.0)	1.0	1.0
071	1.0-2.0(0.0-2.0)	0.0	0.0
072	1.0(0.0-2.0)	1.0	1.0
073	1.0(0.0-2.0)	0.0	0.0
074	2.0(0.0-3.0)	1.0	1.0
075	2.0(1.0-3.0)	2.0	1.0
076	3.0(1.0-3.0)	1.0	2.0
077			
078	these transects not flown due to tide out in Broad Sound		
079			
080			
081	0.0	1.0	1.0
082	0.0-1.0	0.0(0.0-1.0)	0.0
083	0.0-1.0	2.0	2.0
084	0.0-1.0	0.0-2.0	0.0-2.0
085	1.0(0.0-1.0)	2.0	2.0
086	1.0	1.0-2.0	1.0-2.0
087	0.0-1.0	0.0	1.0
088	1.0(1.0-2.0)	2.0	2.0
089	3.0(1.0-3.0)	1.0(0.0-1.0)	1.0
090	3.0(1.0-3.0)	1.0(0.0-1.0)	1.0(0.0-2.0)
091	3.0(2.0-3.0)	0.0-1.0	0.0-1.0
092	0.0(0.0-0.5)	0.0	0.0
093	0.0(0.0-0.5)	0.0	0.0
094	0.0-0.5	0.0	0.0-1.0
095	0.0(0.0-1.0)	0.0	0.0
096	0.0(0.0-1.0)	0.0-1.0	0.0-1.0
097	0.0(0.0-1.0)	0.0	0.0
098	1.0(0.0-1.0)	0.0-1.0	0.0-1.0
099	1.0(0.0-1.0)	0.0	0.0
100	1.0(0.0-1.0)	1.0	1.0
101	1.0	0.0	1.0
102	1.0(1.0-2.0)	2.0	2.0
103	1.0(1.0-2.0)	1.0-2.0	1.0
104	1.0(1.0-3.0)	2.0	2.0

TABLE 2: continued.

(b) Mackay/Capricorn Section, November 1986

Transect No.	Beaufort Sea	Glare	
	State mode(range)	North/East mode(range)	South/West mode(range)
105	1.0(1.0-2.0)	2.0	2.0
106	2.0(0.0-2.0)	1.0-2.0	2.0
107	1.0-2.0	1.0-2.0	1.0
108	3.0(3.0-4.0)	2.0	1.0-2.0
109	1.0	0.0	0.0-1.0
110	1.0(0.0-1.0)	0.0	0.0
111	1.0(0.0-1.0)	0.0	0.0-1.0
112	1.0(0.0-1.0)	0.0	0.0(0.0-2.0)
113	1.0(0.0-1.0)	0.0-1.0	0.0-1.0
114	1.0	0.0	0.0-2.0
115	0.0-1.0	1.0(0.0-1.0)	0.0-2.0
116	0.0-1.0	0.0	1.0-2.0
117	0.0	0.0	0.0
118	0.0	0.0	0.0
119	0.0	1.0	1.0
120	0.0-1.0	0.0	1.0
121	0.0	0.0	0.0-1.0
122	0.0	0.0	0.0-2.0
123	0.0-1.0	1.0(0.0-1.0)	1.0(0.0-1.0)
124	0.0	0.0(0.0-1.0)	1.0(1.0-2.0)
125	0.0-1.0	0.0-1.0	0.0-1.0
126	0.0	0.0	0.0
127	2.0(2.0-3.0)	2.0	2.0
128	2.0	2.0	2.0
129	3.0(2.0-3.0)	2.5	2.0
130	2.0(2.0-3.0)	2.0	2.0
131	1.0(1.0-2.0)	2.0	2.0
132	1.0-3.0	1.0-2.0	1.0-2.0
133	1.0	-	0.0
134	0.5(0.5-1.0)	1.0	1.0-2.0
135	0.0	0.0	0.0
136	0.0	0.0	0.0
137	0.0	-	-
138	1.0	1.0	1.0
139	1.0	1.0	0.0-1.0
140	1.0(1.0-2.0)	2.0	2.0
141	-	1.0	2.0
142	2.5-3.0	1.0	1.0
143	-	-	-
144	1.0	1.0-2.0	1.0

TABLE 2: continued.

(c) Cairns Section, October 1987

Transect No.	Beaufort Sea State mode(range)	Glare	
		North/East mode(range)	South/West mode(range)
201	0.0-1.0	0.0-1.0	0.0-1.0
202	1.0(0.0-1.0)	1.0	1.0
203	0.5-1.0(0.0-1.0)	1.0(0.0-2.0)	0.0(0.0-1.0)
204	0.0-0.5(0.0-1.0)	1.0(0.0-1.0)	0.0(0.0-1.0)
205	0.5(0.0-1.0)	1.0-2.0	0.0
206	1.0(0.5-2.0)	0.0(0.0-1.0)	0.0(0.0-2.0)
207	1.0(0.5-1.5)	1.0(1.0-2.0)	1.0(0.0-1.0)
208	1.0(1.0-2.0)	1.0(1.0-3.0)	1.0(0.0-2.0)
209	1.0(0.5-2.5)	2.0(1.0-2.0)	1.0(0.0-1.0)
210	2.0(1.0-2.0)	0.0(0.0-2.5)	0.0(0.0-2.0)
211	1.0-2.5	2.0(1.0-2.0)	1.0(0.0-1.0)
212	1.0(1.0-2.5)	2.0	1.0
213	1.0(0.0-1.0)	1.0	1.0
214	1.5	0.0-1.0	0.0-1.0
215	1.0-1.5	0.0-1.0	1.0
216	1.0-2.0	1.0	1.0
217	1.0-1.5(0.0-1.5)	1.0	1.0
218	1.5(1.0-2.0)	0.0-1.0	1.0
219	1.5(1.0-2.0)	0.0(0.0-1.0)	1.0(0.0-1.0)
220	2.0	0.0-2.0	0.0(0.0-1.0)
221	0.0(0.0-1.0)	0.0-1.0	0.0
222	0.0-0.5	0.0-2.0	0.0
223	0.0(0.0-1.0)	0.0-1.0	0.0
224	1.0(0.0-1.0)	0.0-2.0	0.0-1.0
225	0.5(0.0-1.0)	0.0-1.0	0.0-2.0
226	0.0(0.0-2.0)	0.0-1.0	0.0-1.0
227	1.5(1.5-2.0)	1.0-2.0	1.0-2.0
228	1.5(1.5-2.0)	1.0-2.0	1.0-2.0
229	2.0(1.0-2.0)	0.0-2.0	0.0(0.0-1.0)
230	1.0(0.0-1.0)	0.0-2.0	0.0-1.0
231	1.0(0.0-1.0)	1.0-2.0(0.0-2.0)	0.0-1.0(0.0-2.0)
232	1.0(0.0-1.0)	2.0(1.0-2.0)	1.0(0.0-2.0)
233	1.0(0.0-2.0)	1.0(0.0-2.0)	0.0(0.0-2.0)
234	1.0(0.0-2.0)	1.0	0.0-1.0
235	2.0(0.0-2.5)	1.0(0.0-2.0)	0.0-1.0
236	0.0-1.0(0.0-2.0)	0.0	0.0-1.0
237	1.0(0.0-1.0)	0.0-1.0	0.0-1.0
238	0.0(0.0-1.0)	0.0(0.0-1.0)	0.0(0.0-1.0)
239	0.0-1.0(0.0-2.0)	0.0	0.0-1.0
240	0.0(0.0-1.0)	0.0(0.0-1.0)	0.0(0.0-1.0)
241	0.0-0.5	0.0(0.0-1.0)	0.0(0.0-1.0)
242	0.0-0.5(0.0-1.0)	0.0-1.0	0.0
243	0.0(0.0-0.5)	0.0	0.0-1.0
244	0.0(0.0-0.5)	0.0	0.0
245	0.0(0.0-0.5)	0.0	0.0
246	0.0(0.0-0.5)	0.0-1.0	0.0]
247	0.0(0.0-2.0)	0.0	0.0
248	0.0(0.0-0.5)	1.0	0.0
249	0.0(0.0-0.5)	0.0-1.0	0.0
250	0.5(0.5-1.0)	0.0-1.0	0.0
251	1.0(0.0-1.0)	0.0(0.0-1.0)	0.0
252	1.0(1.0-2.0)	1.0(0.0-1.0)	0.0-1.0

TABLE 2: continued.

(c) Cairns Section, October 1987

Transect No.	Beaufort Sea	Glare	
	State mode(range)	North/East mode(range)	South/West mode(range)
253	1.0(1.0-2.5)	0.0-1.0	1.0(0.0-2.0)
254	2.0(1.0-3.0)	0.0-2.0	1.0(0.0-2.0)
255	1.5(1.0-3.0)	1.0(0.0-1.0)	1.0(1.0-2.0)
256	1.0(1.0-2.5)	2.0(0.0-2.0)	0.0(0.0-2.0)
257	1.0-2.0(1.0-3.0)	1.0(0.0-1.0)	1.0(0.0-1.0)
258	2.0(2.0-3.0)	1.0(0.0-3.0)	2.0(0.0-2.0)
259	3.0(2.0-3.0)	2.0	2.0
260	2.0-3.0	3.0(2.0-3.0)	2.0
261	1.0(1.0-3.0)	2.5	1.0-2.0
262	3.0(2.0-3.0)	2.0-3.0	2.0
263	3.0(2.5-3.0)	2.5	2.0
264	3.0(2.0-3.0)	2.0(2.0-3.0)	2.0(1.0-2.0)
265	1.0	0.0	0.0
266	2.0	1.0	2.0
267	2.0	0.0-1.0	1.0-2.0
268	2.0	2.0	1.0
269	2.0(2.0-2.5)	2.0	2.0
270	2.0	2.0	1.0
271	3.0	2.0	1.0-2.0
272	2.0	2.0	1.0
273	2.0-3.0	0.0-2.0	1.0-2.0
274	1.0(1.0-2.0)	1.0	1.0
275	1.0	U	U
276	1.0	U	U
277	no data recorded	U	U

U direction of flight unknown

TABLE 3: Raw data for each survey: dugong sightings.

## (a) Central Section

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem
(a) Northern Central Section, September 1986								
001	2	2	0	0	1	0	0	0
002	2	2	2	0	2	0	0	0
003	2	2	1	1	0	1	0	1
004	2	2	0	0	3	0	1	0
005	2	2	0	0	0	0	0	0
006	2	2	0	0	0	0	0	0
007	2	2	0	0	0	0	0	0
008	2	2	0	0	0	0	0	0
009	2	2	0	0	0	0	0	0
010	2	2	0	0	0	0	0	0
011	2	2	0	1	0	0	0	0
012	2	2	0	0	0	0	0	0
013	2	2	0	0	0	0	0	0
014	2	2	0	0	0	0	0	0
015	2	2	0	0	0	0	0	0
016	1	2		0		0	0	0
017	2	2	0	0	0	0	0	0
018	2	2	0	0	0	0	0	0
019	2	2	1	0	0	0	0	0
020	2	2	0	0	0	0	0	0
021	2	2	0	0	0	0	0	0
022	2	2	0	0	0	0	1	0
023	2	2	0	0	0	0	0	0
024	2	2	0	0	0	0	0	0
025	2	2	0	0	0	0	0	0
026	2	2	0	0	0	0	0	0
027	2	2	0	0	0	0	0	0
028	2	2	0	0	0	0	0	0
029	2	2	0	0	0	0	0	0
030	2	2	0	0	0	0	0	0
031	1	2		0		0	0	0
032	1	2		0		0	0	0
033	1	2		0		0	0	0
034	1	2		0		0	0	0
035	1	2		0		0	0	0
036	1	2		0		0	0	0
037	1	2		0		0	0	0
038	1	2		0		1	0	2
039	1	2		0		0	0	0
040	1	2		0		0	0	0
041	1	2		2		0	0	0
042	1	2		0		0	0	0
043	1	2		0		0	0	0
044	1	2		0		0	0	0
045	1	2		1		0	0	0
046	1	2		0		0	0	0
047	1	2		0		0	0	0
048	1	2		0		0	0	1
049	1	2		0		0	0	0
050	1	2		0		0	0	0
051	2	2	0	0	1	0	0	0



TABLE 3: continued.

## (a) Central Section

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem
(a) Northern Central Section, September 1986								
052	2	2	1	0	0	0	0	1
053	2	2	1	0	0	0	0	0
054	2	2	0	0	1	0	0	0
055	2	2	0	0	1	0	0	0
056	2	2	0	0	0	0	0	0
057	2	2	0	0	0	1	0	0
058	2	2	0	0	0	0	0	0
059	2	2	0	0	0	0	0	1
060	2	2	0	0	0	0	0	0
061	2	2	0	1	2	0	0	0
062	2	2	0	0	0	0	0	0
063	1	2		0		0	0	0
			8	9	11	5	5	7

TABLE 3: continued.

## (a) Central Section

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem

## (b) Northern Central Section, October 1987

101	2	2	0	0	0	0	0	0
102	2	2	1	0	0	0	0	0
103	2	2	1	0	1	0	0	0
104	2	2	0	0	0	0	0	1
105	2	2	0	0	0	0	0	0
106	2	2	0	0	1	0	0	1
107	2	2	1	0	1	0	1	0
108	2	2	0	0	0	0	0	0
109	2	2	0	0	0	0	0	0
110	2	2	0	0	0	0	0	0
111	2	2	0	0	0	0	0	0
112	2	2	0	0	0	0	0	0
113	2	2	0	0	0	0	0	0
114	2	2	0	0	0	0	0	0
115	2	2	0	0	0	0	0	0
116	2	2	0	0	0	0	0	0
117	2	2	0	0	0	0	0	0
118	2	2	0	0	0	0	0	0
119	2	2	0	0	0	0	0	0
120	2	2	0	0	0	0	0	0
121	2	2	0	0	0	0	0	0
122	2	2	0	0	0	0	0	0
123	2	2	0	0	0	0	0	0
124	2	2	0	0	0	0	0	0
125	2	2	0	0	0	0	0	0
126	2	2	0	0	0	0	0	0
127	2	2	0	0	0	0	0	0
128	2	2	0	0	0	0	0	0
129	2	2	0	0	0	0	0	0
130	2	2	0	0	0	0	0	0
131	2	2	0	0	0	0	0	0
132	2	2	0	0	0	0	0	0
133	2	2	0	0	0	0	0	0
134	2	2	0	0	0	0	0	0
135	2	2	0	0	0	0	0	0
136	2	2	0	0	0	0	0	0
137	2	2	0	0	0	0	0	0
138	2	2	0	0	0	0	0	0
139	2	2	0	0	0	0	0	0
140	2	2	0	0	0	0	0	0
141	2	2	0	0	0	0	0	0
142	2	2	0	0	0	0	0	0
143	2	2	1	0	0	0	0	0
144	2	2	0	0	0	0	0	0
145	2	2	0	0	0	0	0	0
146	2	2	0	0	0	0	0	0
147	2	2	0	0	0	0	0	0
148	2	2	0	0	0	0	0	0
149	2	2	0	0	0	0	0	0
150	2	2	0	0	1	1	0	0
151	2	2	0	0	0	0	0	0

TABLE 3: continued.

## (a) Central Section

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem
(b) Northern Central Section, October 1987								
152	2	2	0	0	0	0	0	0
153	2	2	0	0	0	0	0	0
154	2	2	0	0	0	0	0	0
155	2	2	0	0	0	0	0	0
156	2	2	0	1	0	0	0	0
157	2	2	0	0	1	1	1	0
158	2	2	0	0	0	0	0	2
159	2	2	0	0	1	0	0	0
160	2	2	0	0	0	0	0	0
161	2	2	0	0	0	0	0	0
162	2	2	0	0	0	0	0	0
163	2	2	0	0	0	0	0	0
			4	1	6	3 <sup>a</sup>	2	6 <sup>b</sup>

<sup>a</sup> includes one group of dugongs seen by the starboard mid-seat observer on transects flown in Cleveland Bay that were abandoned due to poor weather and subsequently reflown.

<sup>b</sup> includes two groups of dugongs seen by the starboard observing team on transects flown in Cleveland Bay that were abandoned due to poor weather and subsequently reflown.

TABLE 3: continued.

## (a) Central Section

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem
(c) Southern Central Section, September - October 1987								
001	2	2	0	0	0	0	0	0
002	2	2	0	0	0	0	0	0
003	2	2	0	0	0	0	0	0
004	2	2	0	0	0	0	0	0
005	2	2	0	0	0	0	0	0
006	2	2	0	0	0	0	0	0
007	2	2	0	0	1	0	0	0
008	2	2	0	0	0	0	0	0
009	2	2	0	0	0	0	0	0
010	2	2	0	0	0	0	0	0
011	2	2	0	0	0	0	0	0
012	2	2	0	0	0	0	0	0
013	2	2	0	0	0	0	0	0
014	2	2	0	0	0	0	0	0
015	2	2	0	0	0	0	0	0
016	2	2	0	0	0	0	0	0
017	2	2	0	0	0	0	0	0
018	2	2	0	0	0	0	0	0
019	2	2	0	0	0	0	0	0
020	2	2	0	0	0	0	0	0
021	2	2	0	0	0	0	0	0
022	2	2	0	0	0	0	0	0
023	2	2	0	0	0	0	0	0
024	2	2	0	0	0	0	0	0
025	2	2	0	0	0	0	0	0
026	2	2	0	0	0	0	0	0
027	2	2	0	0	0	0	0	0
028	2	2	0	0	0	0	0	0
029	2	2	0	0	0	0	0	0
030	2	2	0	0	0	0	0	0
031	2	2	0	0	0	0	0	0
032	2	2	0	0	0	0	0	0
033	2	2	0	0	1	0	0	0
034	2	2	0	0	0	0	0	0
035	2	2	0	0	0	0	0	0
036	2	2	0	0	0	0	0	0
037	2	2	0	0	0	0	0	0
038	2	2	0	0	0	0	0	0
039	2	2	0	0	0	0	0	0
040	2	2	0	0	0	0	0	0
041	2	2	0	0	0	0	0	0
042	2	2	0	0	0	0	0	0
043	2	2	0	0	0	0	0	0
044	2	2	0	0	0	0	0	0
045	2	2	0	0	0	0	0	0
046	2	2	0	0	0	0	0	1
047	2	2	0	0	0	0	0	0
048	2	2	0	0	0	0	0	0
049	2	2	0	0	0	1	0	0
050	2	2	0	0	0	0	0	1
051	2	2	0	0	0	1	0	1

TABLE 3: continued.

## (a) Central Section

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem

## (c) Southern Central Section, September - October 1987

052	2	2	0	0	1	0	0	0
053	2	2	0	0	1	0	0	0
054	2	2	0	0	0	0	0	1
055	2	2	0	0	0	0	0	0
056	2	2	0	0	0	0	0	0
057	2	2	0	0	0	0	0	0
058	2	2	0	0	0	0	0	0
059	2	2	0	0	0	0	0	0
060	2	2	0	0	0	0	0	0
061	2	2	0	0	1	0	0	0
062	2	2	1	1	0	0	0	0
063	2	2	0	0	0	0	0	2
064	2	2	0	0	0	0	0	0
065	2	2	0	0	0	0	0	0
066	2	2	0	0	0	0	0	0
067	2	2	0	0	0	0	0	0
068	2	2	0	0	0	0	0	0
069	2	2	0	0	0	0	0	0
070	2	2	0	0	0	0	0	0
071	2	2	0	0	0	0	0	0
072	2	2	0	0	0	0	1	0
073	2	2	0	0	0	0	0	0
074	2	2	0	0	0	0	0	0
075	2	2	0	0	0	0	0	0
076	2	2	1	0	1	0	0	1
077	2	2	1	0	0	0	0	0
078	2	2	0	0	0	0	0	0
079	2	2	0	0	0	0	0	0
080	2	2	0	0	0	0	0	0
081	2	2	0	0	0	0	0	0
082	2	2	0	0	0	0	0	0
083	2	2	0	0	0	0	0	0
084	2	2	0	0	0	0	0	0
			3	1	6	2	1	7

TABLE 3: continued.

(b) Mackay/Capricorn Section, November 1987

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Mid	Port Rear	Tandem	Mid	Starboard Rear	Tandem
001	2	2	0	0	0	0	0	0
002	2	2	0	0	0	0	0	0
003	2	2	0	0	0	0	0	0
004	2	2	0	0	0	0	0	0
005	2	2	0	0	0	0	0	0
006	2	2	0	0	0	0	0	1
007	2	2	0	0	0	0	0	0
008	2	2	0	0	0	0	0	0
009	2	2	0	0	0	0	0	0
010	2	2	0	0	0	0	0	0
011	2	2	0	0	0	0	0	1
012	2	2	0	0	0	0	0	1
013	2	2	0	0	0	0	0	0
014	2	2	0	0	0	0	0	0
015	2	2	0	0	0	0	0	0
016	2	2	0	0	0	0	0	0
017	2	2	0	0	0	0	0	0
018	2	2	0	0	0	0	0	0
019	2	2	0	0	0	0	0	0
020	2	2	0	0	0	0	0	0
021	2	2	0	0	0	0	0	0
022	2	2	0	0	0	0	0	0
023	2	2	0	0	0	0	0	0
024	2	2	0	0	0	0	0	0
025	2	2	0	0	0	0	0	1
026	2	2	0	0	0	0	0	0
027	2	2	0	0	0	0	0	0
028	2	2	0	0	0	0	0	0
029	2	2	0	0	0	0	0	0
030	2	2	0	0	0	0	0	0
031	2	2	0	0	0	0	0	0
032	2	2	0	0	0	0	0	0
033	2	2	0	0	0	0	0	1
034	2	2	0	0	0	0	0	0
035	2	2	0	0	0	0	0	0
036	2	2	0	0	0	0	0	0
037	2	2	0	0	0	0	0	0
038	2	2	0	0	0	0	0	0
039	2	2	0	0	0	0	0	0
040	2	2	0	0	0	0	0	0
041	2	2	0	0	0	0	0	0
042	2	2	0	0	0	0	0	0
043	2	2	0	0	0	0	0	0
044	2	2	0	0	0	0	0	0
045	2	2	0	0	0	0	0	0
046	2	2	0	0	0	0	0	0
047	2	2	0	0	0	0	0	0
048	2	2	0	0	0	0	0	0
049	2	2	0	0	0	0	0	0
050	2	2	0	0	0	0	0	0
051	2	2	0	0	0	0	0	0
052	2	2	1	0	0	0	0	0

TABLE 3: continued.

(b) Mackay/Capricorn Section, November 1987

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem
053	2	2	0	0	0	0	0	0
054	2	2	0	0	0	0	0	0
055	2	2	0	0	0	0	0	0
056	2	2	1	0	0	0	0	0
057	2	2	0	0	0	0	0	0
058	2	2	0	0	0	0	0	0
059	2	2	0	0	1	0	0	0
060	2	2	0	1	1	0	0	2
061	2	2	0	1	1	0	0	1
062	2	2	0	0	0	0	0	0
063	2	2	0	0	1	1	0	0
064	2	1	0	0	0		0	
065	2	1	0	1	1		2	
066	2	1	0	0	1		0	
067	2	1	1	1	2		0	
068	2	1	0	0	1		1	
069	2	1	0	0	1		0	
070	2	1	0	0	0		0	
071	2	1	0	1	0		0	
072	2	1	0	0	0		0	
073	2	1	0	0	0		0	
074	2	1	0	0	0		0	
075	2	2	0	0	0	1	0	0
076	2	2	0	0	0	0	0	0
077								
078			transects not flown this survey due to					
079			tide out in Broad Sound.					
080								
081	2	2	0	0	0	0	0	0
082	2	2	0	0	0	0	0	0
083	2	2	0	0	0	0	1	0
084	2	2	0	0	0	0	0	0
085	2	2	0	0	0	0	0	0
086	2	2	0	0	0	0	1	0
087	2	2	0	0	0	0	0	0
088	2	2	0	0	0	0	1	0
089	2	1	0	0	0		0	
090	2	2	0	0	0	0	1	1
091	2	2	0	0	0	0	0	0
092	2	2	0	0	0	0	0	0
093	2	2	0	0	0	0	0	0
094	2	2	0	0	0	0	0	0
095	2	2	0	0	0	0	0	0
096	2	2	0	0	0	0	0	0
097	2	2	0	0	0	0	0	0
098	2	2	0	0	0	0	0	0
099	2	2	0	0	0	0	0	0
100	2	2	0	0	0	0	0	0
101	2	2	0	0	0	0	0	0
102	2	2	0	0	0	0	0	0
103	2	2	0	0	0	0	0	0
104	2	2	0	0	0	0	0	0

TABLE 3: continued.

(b) Mackay/Capricorn Section, November 1987

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem
105	2	2	0	0	2	0	1	2
106	2	2	0	0	0	0	0	0
107	2	2	0	0	0	0	0	0
108	2	2	0	0	0	0	0	0
109	2	2	0	0	0	0	0	0
110	2	2	0	0	0	0	0	0
111	2	2	0	0	0	0	0	0
112	2	2	0	0	0	0	0	0
113	2	2	0	0	0	0	0	0
114	2	2	0	0	0	0	0	0
115	2	2	0	0	0	0	0	0
116	2	2	0	0	0	0	0	0
117	2	2	0	0	1	0	0	1
118	2	2	0	0	0	0	0	0
119	2	2	0	0	0	0	0	0
120	2	2	0	0	0	0	0	2
121	2	2	0	0	1	0	0	0
122	2	2	1	0	0	0	0	0
123	2	2	0	0	0	0	0	0
124	2	2	0	0	0	0	0	0
125	2	2	1	0	1	0	0	1
126	2	2	0	0	0	0	0	1
127	2	2	0	0	0	0	0	0
128	2	2	0	0	0	0	0	0
129	2	2	0	0	0	0	0	0
130	2	2	0	0	0	0	0	0
131	2	2	0	0	0	0	0	0
132	2	2	0	0	0	0	0	0
133	2	2	0	0	0	0	0	0
134	2	2	0	0	0	0	0	0
135	2	2	0	1	1	0	0	0
136	2	2	0	0	0	0	0	0
137	2	2	0	0	0	1	0	1
138	2	2	0	0	0	0	0	0
139	2	2	0	0	0	0	0	0
140	2	2	0	0	0	0	0	1
141	2	2	0	0	0	0	0	0
142	2	2	0	1	0	0	0	0
143	2	2	0	0	0	1	0	0
144	2	2	0	0	0	1	0	0
			5	8	16	5	8	18



TABLE 3: continued.

(c) Cairns Section, October 1987

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Mid	Port Rear	Tandem	Mid	Port Rear	Tandem
201	2	2	0	0	0	0	0	0
202	2	2	0	0	0	0	0	0
203	2	2	0	0	0	0	0	0
204	2	2	0	0	0	0	0	0
205	2	2	0	0	0	0	1	0
206	2	2	0	0	0	0	0	0
207	2	2	0	0	0	0	0	0
208	2	2	0	0	0	0	0	0
209	2	2	0	0	0	0	0	0
210	2	2	0	0	0	0	0	0
211	2	2	0	0	0	0	0	0
212	2	2	0	0	0	0	0	0
213	2	2	0	0	0	0	0	0
214	2	2	0	0	0	0	0	0
215	2	2	0	0	0	0	0	0
216	2	2	0	0	0	0	0	0
217	2	2	0	0	0	0	0	0
218	2	2	0	0	0	0	0	0
219	2	2	0	0	0	0	0	0
220	2	2	0	0	0	0	0	0
221	2	2	0	0	0	0	0	0
222	2	2	0	0	0	0	0	0
223	2	2	0	0	0	0	0	0
224	2	2	0	0	0	0	0	0
225	2	2	0	0	0	0	0	0
226	2	2	0	0	0	0	0	0
227	2	2	0	0	0	0	0	0
228	2	2	0	0	0	0	0	0
229	2	2	0	0	0	0	0	0
230	2	2	0	0	0	0	0	0
231	2	2	0	0	0	0	0	0
232	2	2	0	0	0	0	0	0
233	2	2	0	0	0	0	0	0
234	2	2	0	0	0	0	0	0
235	2	2	0	0	0	0	0	0
236	2	2	0	0	0	0	0	0
237	2	2	0	0	0	0	0	0
238	2	2	0	0	0	0	1	0
239	2	2	0	0	0	0	0	0
240	2	2	0	0	0	0	0	0
241	2	2	0	0	0	0	0	0
242	2	2	0	0	0	0	0	0
243	2	2	0	0	0	0	0	0
244	2	2	0	0	0	0	0	0
245	2	2	0	0	0	0	0	0
246	2	2	0	0	0	0	0	0
247	2	2	0	0	0	0	0	0
248	2	2	0	0	0	0	0	0
249	2	2	0	0	0	0	0	0
250	2	2	0	0	0	0	0	0
251	2	2	0	0	0	0	0	0
252	2	2	0	0	0	0	0	0

TABLE 3: continued.

(c) Cairns Section, October 1987

Transect No.	No. of observers		No. of groups of dugongs					
	Port	Starboard	Port			Starboard		
			Mid	Rear	Tandem	Mid	Rear	Tandem
253	2	2	0	0	0	0	0	0
254	2	2	0	0	0	0	0	0
255	2	2	0	0	0	0	0	0
256	2	2	0	0	0	0	0	0
257	2	2	0	0	0	0	0	0
258	2	2	0	0	0	0	0	0
259	2	2	0	0	0	0	0	0
260	2	2	0	0	0	1	0	0
261	2	2	0	0	0	0	0	1
262	2	2	0	0	0	0	0	0
263	2	2	0	0	0	0	0	0
264	2	2	0	0	0	0	0	0
265	2	2	0	0	0	0	0	0
266	2	2	0	1	0	0	0	0
267	2	2	0	0	0	0	0	0
268	2	2	0	0	0	0	0	0
269	2	2	0	0	0	0	0	0
270	2	2	0	0	0	0	0	0
271	2	2	0	0	0	0	0	0
272	2	2	0	0	0	0	0	0
273	2	2	0	0	0	0	0	0
274	2	2	0	0	0	0	0	0
275	2	2	0	0	0	0	0	0
276	2	2	0	0	0	0	0	0
277	2	2	0	0	0	0	0	0
			0 <sup>d</sup>	1 <sup>d</sup>	0 <sup>d</sup>	1 <sup>d</sup>	2 <sup>d</sup>	1 <sup>d</sup>

<sup>d</sup> these sightings constituted too few observations for any correction factors for the Cairns Section to be calculated.

TABLE 4: Raw data used to calculate correction factors for the surveys.

(a) Correction for perception bias

Blocks : lines	No. of groups of dugongs					
	Port			Starboard		
	Mid	Rear	Tandem	Mid	Rear	Tandem
(a) Northern Central Section, September 1986						
9: 16, 31-38; 2: 38; 11	8 <sup>a</sup>	9 <sup>a</sup>	11 <sup>a</sup>	5	2	7
8; 9: 11-14 & 17-30; 10: 51-58, 61, 64	8	6	11	5	2	7
(b) Central Section, September - October 1987						
All blocks and lines	7	2	12	5	3	13
(c) Mackay/Capricorn Section, November 1986						
5: 64-74; 3: 89	5	8	16	5 <sup>b</sup>	8 <sup>b</sup>	18 <sup>b</sup>
1; 2; 3; 4; 5: 50-63, 75 & 138-144; 6: 76, 81-88 & 90-106; 7; 8	5	8	16	5	5	18

<sup>a</sup> port perception correction factor based on port rear-seat observer for rest of the survey while mid-seat observer on training transects.

<sup>b</sup> starboard perception correction factor based on starboard rear-seat observer for rest of the survey while mid-seat observer on training transects.

(b) Correction for availability bias

Blocks : lines	No. of dugongs in groups of less than 10		
	Surface	Under	Total
(a) northern Central Section, September 1986			
All blocks and lines	27	27	54
(b) Central Section, September - October 1987			
All blocks and lines	41	29	70
(c) Mackay/Capricorn Section, November 1986			
All blocks and lines	41	39	80

TABLE 5: Logistics of flight time for each survey.

Date	Transit Time (hrs)	Survey Time (hrs)	Dead Time (hrs)
(a) Northern Central Section, September 1986			
22/09/86	1.6	2.7	0.7
23/09/86	1.2	2.9	1.2
24/09/86	0.9	2.9	0.8
	3.7	8.5	2.7
(b) Central Section, September - October 1987			
29/09/87	1.11	3.37	1.20
30/09/87	2.83	3.44	1.32
1/10/87	1.34	9.49	3.37
5/10/87	0.69	3.03	0.71
6/10/87	1.42	2.52	1.35
7/10/87	1.55	2.73	0.72
21/10/87 <sup>a</sup>	0.38	1.44	0.46
	9.32	26.02	9.13
(c) Mackay/Capricorn Section, November 1986			
18/11/86	1.2	1.9	0.5
21/11/86	2.3	3.9	1.2
22/11/86	1.3	4.2	1.0
23/11/86	1.4	4.0	1.2
24/11/86	2.4	4.1	0.9
25/11/86	1.4	2.6	0.6
26/11/86	0.6	0.2	0.0
27/11/86	0.5	2.6	0.3
	11.1	23.5	5.7
(c) Cairns Section, October 1987			
12/10/87	1.36	3.09	0.55
13/10/87	1.78	3.58	0.49
14/10/87	0.70	2.44	0.52
15/10/87	2.53	2.64	0.64
16/10/87	0.71	1.88	0.73
aircraft ferry	2.47	0.00	0.00
	9.55	13.63	2.93

<sup>a</sup> transect numbers 101-110,159,160,162 which were originally flown on the 5/10/87 and abandoned due to very poor weather were reflown on the 21/10/87.