

Table S1: Species, sex, Fish ID, dates released and recaptured, days at liberty and number of detections in the array

<i>Species</i>	<i>ID</i>	<i>Date of Release</i>	<i>Sex</i>	<i>Re-Capture Date</i>	<i>Days at Liberty</i>	<i>Number of detections</i>
<i>R. brachyura</i>	655	2015-06-09	f			131
<i>R. brachyura</i>	667	2015-07-01	f			60
<i>R. brachyura</i>	695	2015-07-09	f	2016-04-24	289	19
<i>R. brachyura</i>	681	2015-07-16	m	2015-11-24	130	8
<i>R. brachyura</i>	692	2015-07-16	m			1203
<i>R. brachyura</i>	693	2015-07-16	m			16
<i>R. brachyura</i>	700	2015-07-23	m	2015-11-26	125	13
<i>R. brachyura</i>	704	2015-07-23	f	2015-08-28	35	1
<i>R. brachyura</i>	706	2015-07-23	m			13
<i>R. brachyura</i>	707	2015-07-23	m			411
<i>R. brachyura</i>	712	2015-07-23	f	2015-07-29	5	6
<i>R. brachyura</i>	713	2015-07-23	m			134
<i>R. brachyura</i>	714	2015-07-23	f	2015-08-28	35	2
<i>R. brachyura</i>	715	2015-07-23	f			60
<i>R. brachyura</i>	729	2015-08-11	f			412
<i>R. brachyura</i>	733	2015-08-11	f			271
<i>R. brachyura</i>	734	2015-08-11	m	2015-11-25	105	272
<i>R. brachyura</i>	736	2015-08-11	m			8
<i>R. brachyura</i>	737	2015-08-11	f			53
<i>R. brachyura</i>	740	2015-08-12	m	2016-04-04	235	46
<i>R. brachyura</i>	741	2015-08-12	f			323
<i>R. brachyura</i>	744	2015-09-02	m	2015-10-27	54	17
<i>R. clavata</i>	451	2011-04-28	f			6549
<i>R. clavata</i>	565	2013-01-15	f	2013-07-08	173	1002
<i>R. clavata</i>	566	2013-01-15	f			606
<i>R. clavata</i>	581	2013-01-16	f	2013-04-21	94	5174

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<i>R. clavata</i>	590	2013-01-16	f	2013-07-08	172	13165
<i>R. clavata</i>	669	2015-07-01	f	2016-05-19	322	14
<i>R. clavata</i>	676	2015-07-09	m	2016-01-25	199	9
<i>R. clavata</i>	677	2015-07-10	f	2015-09-26	77	207
<i>R. clavata</i>	702	2015-07-23	f			51
<i>R. clavata</i>	705	2015-07-23	f	2015-08-22	29	12
<i>R. clavata</i>	755	2015-10-15	m			79
<i>R. clavata</i>	1022	2015-12-15	f			621
<i>R. clavata</i>	1023	2015-12-15	m			1
<i>R. clavata</i>	1024	2015-12-15	f			3
<i>R. clavata</i>	1026	2016-01-21	m			11
<i>R. clavata</i>	1027	2016-01-21	f	2016-05-12	111	99
<i>R. clavata</i>	1028	2016-01-21	m			7
<i>R. clavata</i>	1029	2016-01-21	m	2016-06-13	143	273
<i>R. clavata</i>	1030	2016-01-21	m	2016-06-06	136	96
<i>R. clavata</i>	1031	2016-01-21	m			15
<i>R. clavata</i>	1032	2016-01-21	m	2016-04-27	96	41
<i>R. clavata</i>	1033	2016-01-21	m			9
<i>R. clavata</i>	1034	2016-01-21	f	2016-04-27	96	55
<i>R. clavata</i>	1035	2016-01-21	m			18
<i>R. clavata</i>	1036	2016-01-21	m			11
<i>R. clavata</i>	1039	2016-01-21	m			38
<i>R. clavata</i>	1053	2016-01-28	m	2016-02-03	5	207
<i>R. clavata</i>	1054	2016-01-28	m			7
<i>R. clavata</i>	1055	2016-01-28	m			105
<i>R. clavata</i>	1046	2016-02-03	m			191
<i>R. clavata</i>	1047	2016-02-03	f	2016-06-06	123	311

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<i>R. clavata</i>	1049	2016-02-03	m	2016-05-26	112	1
<i>R. clavata</i>	1050	2016-02-03	f	2016-04-27	83	285
<i>R. clavata</i>	1066	2016-02-23	f	2016-05-07	73	1
<i>R. clavata</i>	1067	2016-02-23	f			217
<i>R. clavata</i>	1069	2016-02-23	f	2016-05-07	73	37
<i>R. clavata</i>	1072	2016-02-24	f	2016-05-13	78	13
<i>R. microocellata</i>	340	2010-01-14	m			134
<i>R. microocellata</i>	343	2010-01-14	f	2011-04-25	466	32
<i>R. microocellata</i>	344	2010-01-14	f			201
<i>R. microocellata</i>	375	2010-01-14	f			6
<i>R. microocellata</i>	376	2010-01-14	f	2010-06-22	159	12
<i>R. microocellata</i>	361	2010-01-27	f	2010-05-06	99	751
<i>R. microocellata</i>	409	2010-06-23	f	2010-08-12	49	1130
<i>R. microocellata</i>	410	2010-06-23	m			80
<i>R. microocellata</i>	421	2010-07-22	m	2010-09-16	55	1157
<i>R. microocellata</i>	564	2013-01-15	f			74
<i>R. microocellata</i>	570	2013-01-15	f			8246
<i>R. microocellata</i>	573	2013-01-15	f	2013-02-15	30	10
<i>R. microocellata</i>	580	2013-01-16	f			3540
<i>R. microocellata</i>	969	2014-11-05	m		0	927
<i>R. microocellata</i>	650	2015-05-27	f			40
<i>R. microocellata</i>	743	2015-09-02	m	2015-09-02	0	28
<i>R. microocellata</i>	753	2015-09-03	f	2015-09-06	2	237
<i>R. microocellata</i>	1020	2015-12-15	f	2016-04-22	128	9
<i>R. microocellata</i>	1021	2015-12-15	f			112
<i>R. microocellata</i>	1057	2016-01-28	f			45
<i>R. microocellata</i>	1058	2016-01-28	f			6

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<i>R. microocellata</i>	1059	2016-01-28	f			9
<i>R. microocellata</i>	1041	2016-02-03	f	2016-04-22	78	51
<i>R. microocellata</i>	1042	2016-02-03	f			7
<i>R. microocellata</i>	1043	2016-02-03	f			302
<i>R. microocellata</i>	1044	2016-02-03	f	2016-05-15	101	88
<i>R. microocellata</i>	1048	2016-02-03	f	2016-05-07	93	18
<i>R. microocellata</i>	1051	2016-02-03	f	2016-05-15	101	15
<i>R. microocellata</i>	1052	2016-02-03	f			11
<i>R. microocellata</i>	1068	2016-02-23	f			706
<i>R. microocellata</i>	1070	2016-02-24	m	2016-04-27	62	3
<i>R. microocellata</i>	1071	2016-02-24	m	2016-05-26	91	750
<i>R. microocellata</i>	1062	2016-03-08	f			35
<i>R. microocellata</i>	1060	2016-03-08	f	2016-05-15	67	16
<i>R. microocellata</i>	1063	2016-03-08	f			864
<i>R. microocellata</i>	1064	2016-03-08	f			5279
<i>R. montagui</i>	641		m		0	437
<i>R. montagui</i>	498	2011-01-26	f			10
<i>R. montagui</i>	529	2011-03-23	m	2012-05-16	420	3151
<i>R. montagui</i>	964	2014-09-18	f		0	15
<i>R. montagui</i>	1000	2014-10-29	m	2016-04-25	543	384
<i>R. montagui</i>	1001	2014-10-29	m		0	703
<i>R. montagui</i>	640	2015-04-16	m	2016-03-06	324	141
<i>R. montagui</i>	642	2015-04-16	m			126
<i>R. montagui</i>	643	2015-04-16	m	2015-07-11	85	7
<i>R. montagui</i>	646	2015-05-12	f			170
<i>R. montagui</i>	647	2015-05-12	f			73
<i>R. montagui</i>	656	2015-06-25	f			11319

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<i>R. montagui</i>	657	2015-06-25	f			2
<i>R. montagui</i>	659	2015-06-25	m			18
<i>R. montagui</i>	660	2015-06-25	f	2016-03-01	249	192
<i>R. montagui</i>	665	2015-07-01	f			3
<i>R. montagui</i>	672	2015-07-01	m			294
<i>R. montagui</i>	694	2015-07-09	f	2016-03-03	237	54
<i>R. montagui</i>	697	2015-07-09	m	2016-05-19	314	30
<i>R. montagui</i>	678	2015-07-16	f			5
<i>R. montagui</i>	682	2015-07-16	f	2016-06-02	321	15
<i>R. montagui</i>	685	2015-07-16	f			520
<i>R. montagui</i>	686	2015-07-16	m	2016-06-28	347	98
<i>R. montagui</i>	687	2015-07-16	f			79
<i>R. montagui</i>	691	2015-07-16	f			334
<i>R. montagui</i>	708	2015-07-23	m			2602
<i>R. montagui</i>	710	2015-07-23	f			50
<i>R. montagui</i>	717	2015-07-23	f			7
<i>R. montagui</i>	719	2015-07-23	f			3
<i>R. montagui</i>	720	2015-07-23	m			2
<i>R. montagui</i>	722	2015-07-23	f			24
<i>R. montagui</i>	726	2015-07-23	f	2016-02-26	217	41
<i>R. montagui</i>	728	2015-07-23	m			6
<i>R. montagui</i>	735	2015-08-11	m			19
<i>R. montagui</i>	1019	2015-08-11	f			2
<i>R. montagui</i>	738	2015-08-11	f			2
<i>R. montagui</i>	751	2015-09-03	f	2015-11-12	69	9
<i>R. montagui</i>	754	2015-09-03	f	2015-09-26	22	6
<i>R. montagui</i>	1037	2016-01-21	f	2016-02-29	38	3

Table S2: Statistical results from Wilcoxon signed ranked pairs test, comparing observed to random node metrics.

Species	Observed node density	Mean random node density	V	P	n
<i>R. brachyura</i>	0.67	0.79	3690	<0.001	100
<i>R. clavata</i>	0.92	1.0	5050	<0.001	100
<i>R. microocellata</i>	0.75	0.995	5050	<0.001	100
<i>R. montagui</i>	0.91	0.97	2880	<0.001	100

Table S3: Statistical results from Wilcoxon signed ranked pairs test, comparing observed to random edge metrics.

Species	Observed edge density	Mean random edge density	V	P	n
<i>R. brachyura</i>	0.197	0.104	0	<0.001	100
<i>R. clavata</i>	0.29	0.92	5050	<0.001	100
<i>R. microocellata</i>	0.303	0.66	5050	<0.001	100
<i>R. montagui</i>	0.17	0.15	566	<0.001	100

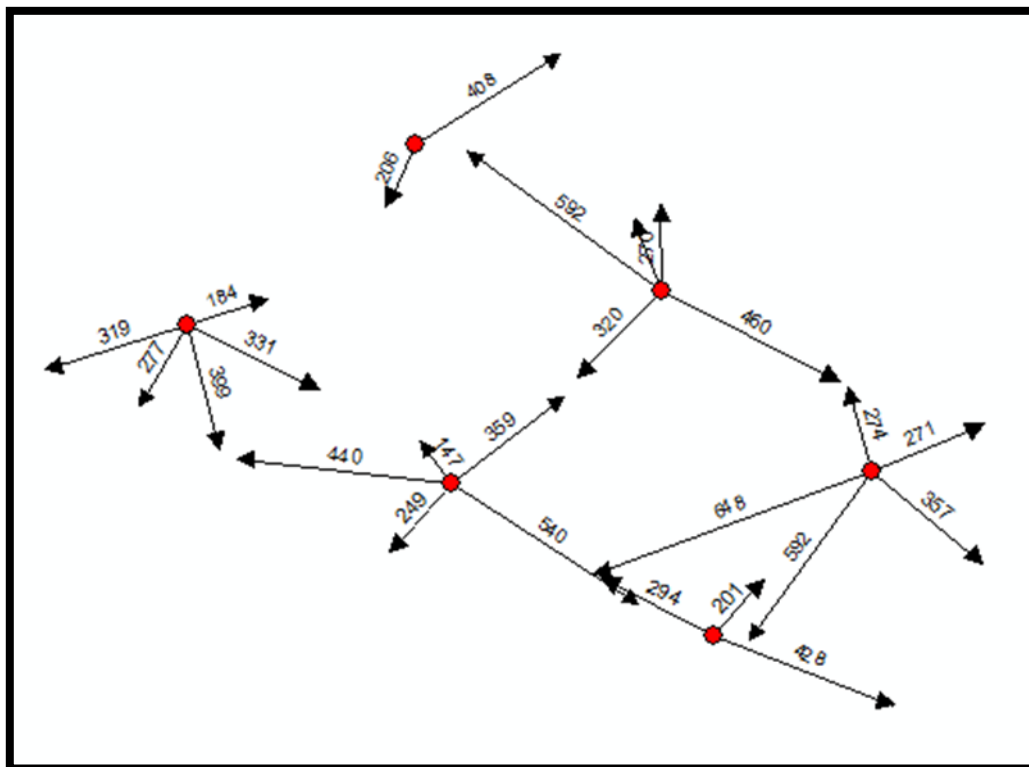


Figure S1: Range testing in Whitsand array. Red circles are the receiver positions and arrows show the distance (m) of detection ranges