

# Responses of reef fish communities to coral declines on the Great Barrier Reef

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## Appendix 1.

Table A1. Changes in 3 extra measures of diversity over time at the 7 worst case reefs, based on repeated-measures ANOVA. Significant p-values ( $p < 0.05$ ) are in **bold**. For time effects, degrees of freedom (df) were: 8, 16 for Havannah Reef; 9, 18 for Thetford Reef; and 10, 20 for all other reefs. For all trend analyses there were 1, 2 df. Positive (+) or negative (–) symbols represent the nature of any significant trend. L: linear trend; Q: quadratic trend. When trends were not significant ( $p > 0.05$ ) at a reef, presented values ( $F$  and  $p$ ) are from the analysis (linear or quadratic) that resulted in the more significant p-value

	Fitzroy Is.		Low Isles		Thetford		Havannah Is.		John Brewer		Rib		Gannet Cay	
	$F$	$p$	$F$	$p$	$F$	$p$	$F$	$p$	$F$	$p$	$F$	$p$	$F$	$p$
<b>Taxonomic diversity: Delta</b>														
Time	7.9	<b>&lt;0.001</b>	8.5	<b>&lt;0.001</b>	8.8	<b>&lt;0.001</b>	4.9	<b>0.003</b>	7.5	<b>&lt;0.001</b>	1.7	0.156	0.9	0.584
Trend	15.0	0.061	179.8	<b>0.006+L</b>	14.4	0.063	60.3	<b>0.016+Q</b>	8.4	0.101	5.0	0.156	2.5	0.253
<b>Total taxonomic distinctness: Sdelta+</b>														
Time	4.5	<b>0.002</b>	3.4	<b>0.009</b>	2.4	0.058	2.6	<b>0.048</b>	1.4	0.255	1.2	0.369	1.5	0.197
Trend	2.3	0.266	186.0	<b>0.005+L</b>	26.5	<b>0.036+Q</b>	11.7	0.076	139.6	<b>0.007–Q</b>	20.8	<b>0.045+L</b>	7.9	0.106
<b>Variation in taxonomic distinctness: Lambda+</b>														
Time	3.5	<b>0.008</b>	1.5	0.225	0.7	0.687	2.7	<b>0.042</b>	0.6	0.805	1.2	0.34	2.7	<b>0.027</b>
Trend	1.8	0.31	7.0	0.118	8.1	0.105	37.8	<b>0.025–L</b>	0.4	0.574	22.8	<b>0.041–L</b>	4.8	0.161

Appendix 1 (continued)

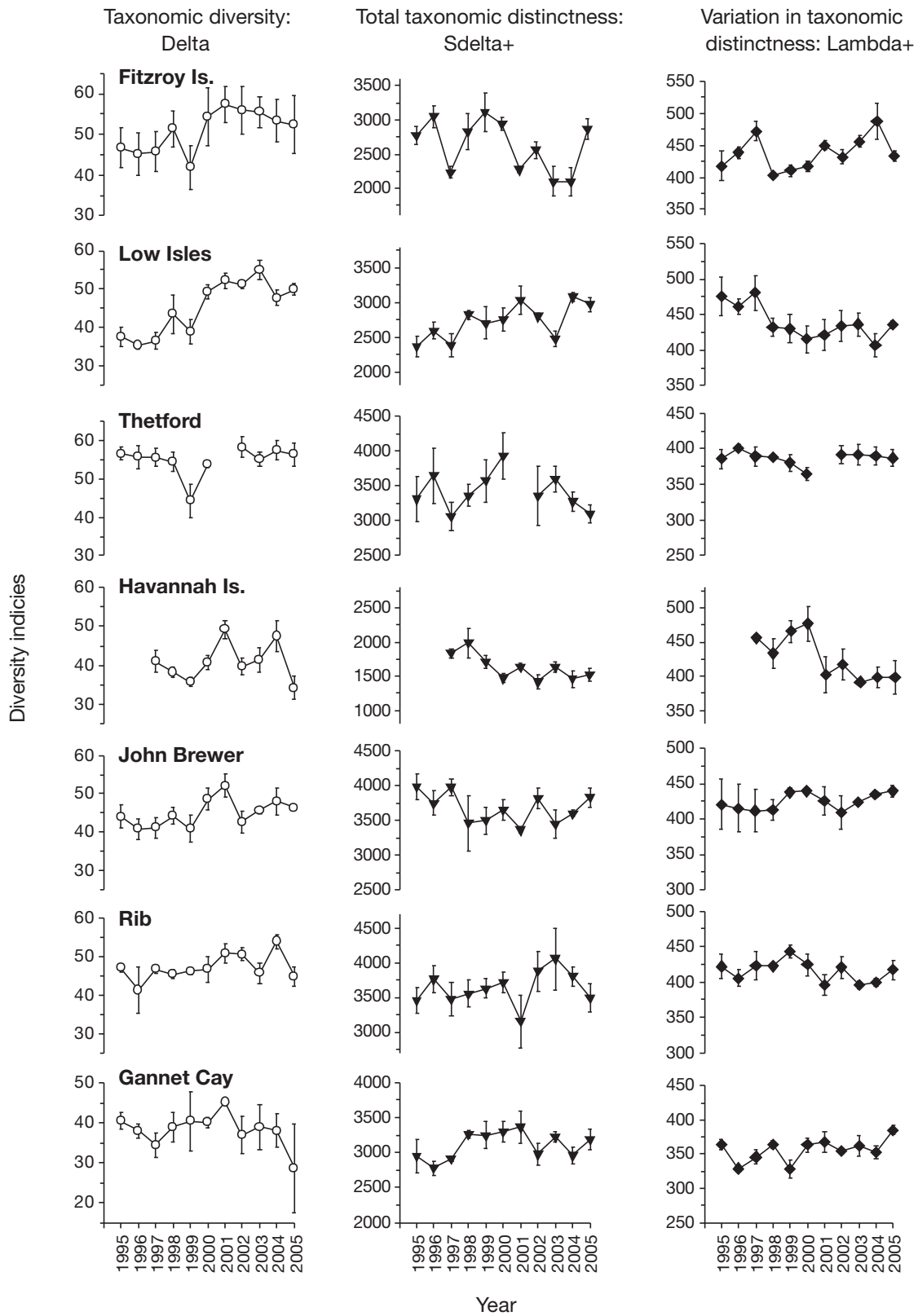


Fig. A1. Temporal changes of 3 extra diversity indices at the 7 worst case reefs (means  $\pm$  1 SE). Havannah Is. was not surveyed in 1995 or 1996 and Thetford Reef was not surveyed in 2001