**Table S1.** Live coral cover (LCC) temporal dynamics and temporal shift in coral reef fish communities. For each reef, LCC temporal dynamics was modeled as either a logistic or a linear model. For logistic models, *C*b and *C*a are the asymptotic LCC values before and after the inflexion point, respectively. *T* is the estimated year where the inflection occurred, whileΔ is the magnitude of LCC loss during the perturbation, measured as the difference between *C*b and *C*a. For the linear model, *b* corresponds to the slope, i.e. the amount of coral cover lost per year. *R*² is the adjusted coefficient of determination of each model. Hyphens indicate that the linear model or the logistic model (e.g. reef #10) were not the best fit. In addition, we also provide for each reef the estimated year at which fish richness was maximum (SRmax) and the estimated year the temporal shift in fish composition occurred (RT). The lag (in years) between the inflection point in coral cover loss (*T*) and the year at which fish richness was maximum is provided in parentheses. Significance of temporal shifts was tested by RDA (*P* < 0.001 for all reefs) while the corresponding adjusted *R*² are shown in brackets in the RT column.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Coral cover** | | | | | | | |  | **Fish community** | |
|  | **Logistic model** | | | | |  | **Linear model** | |  |  |  |
| **Reef** | ***R*²** | ***C*b (95% CI)** | ***C*a (95% CI)** | ***T*** | ***Δ*** |  | ***R*²** | ***b*** |  | **SRmax** | **RT** |
| 1 | 0.85 | 47.14 (42.36:51.92) | 3.91 (0:8.26) | 2008 | 43.23 |  | - | - |  | 2008.0 (0) | 2009.0 (10.5) |
| 2 | 0.89 | 58.59 (52.46:64.72) | 2.83 (0:8.42) | 2008 | 55.76 |  | - | - |  | 2008.5 (0.5) | 2011.0 (15.9) |
| 3 | 0.94 | 49.75 (46.78:52.72) | 1.07 (0:4.06) | 2008 | 48.68 |  | - | - |  | 2008.0 (0) | 2007.0 (14.1) |
| 4 | 0.89 | 42.76 (38.2:47.32) | 2.02 (0:5.77) | 2007 | 40.74 |  | - | - |  | 2008.5 (1.5) | 2007.5 (19.3) |
| 5 | 0.95 | 47.94 (45.52:50.36) | 1.56 (0:4.18) | 2008 | 46.38 |  | - | - |  | 2009.5 (1.5) | 2009.5 (13.0) |
| 6 | 0.87 | 41.39 (37.91:44.87) | 2.96 (0:6.44) | 2008 | 38.43 |  | - | - |  | 2009.5 (1.5) | 2008.0 (13.2) |
| 7 | 0.89 | 47.70 (44.54:50.86) | 3.56 (0:8.37) | 2009 | 44.14 |  | - | - |  | 2010.0 (1) | 2007.0 (11.1) |
| 8 | 0.93 | 44.44 (40.7:48.01) | 4.55 (1.39:7.71) | 2009 | 39.83 |  | - | - |  | 2009.5 (0.5) | 2007.0 (8.7) |
| 9 | 0.84 | 46.39 (34.65:58.13) | 2.51 (0:10.82) | 2008 | 43.88 |  | - | - |  | 2009.5 (1.5) | 2010.0 (10.7) |
| 10 | - | - | - | - | 28.00 |  | 0.61 | -3.83 (-4.78:-2.88) |  | - | 2008.0 (13.8) |
| 11 | 0.73 | 32.05 (28.87:35.24) | 7.48 (3.68:11.27) | 2008 | 24.57 |  | - | - |  | 2008.5 (0.5) | 2009.0 (16.7) |
| 12 | 0.88 | 42.00 (38.85:45.15) | 5.85 (1.96:9.75) | 2008 | 36.15 |  | - | - |  | 2008.5 (0.5) | 2010.0 (18.6) |
| 13 | 0.84 | 40.03 (36.3:43.76) | 6.08 (1.87:10.3) | 2008 | 33.95 |  | - | - |  | 2008.0 (0.0) | 2010.0 (12.5) |