

## Corrigendum

# Coral growth, bioerosion, and secondary accretion of living orbicellid corals from mesophotic reefs in the US Virgin Islands

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*Mar Ecol Prog Ser* 559: 45–63, 2016, <https://doi.org/10.3354/meps11883>

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To ensure that readers have the most accurate data, the authors would like to correct a number of mistakes made in the original published article. These errors do not change the main results, conclusions, or general concepts of the work. However, the authors feel it is important to correct these issues.

- On page 50 in the second paragraph of the section 'Bioerosion, secondary accretion, and total framework growth', the term 'overall site  $\Delta\bar{C}$ ' should include a better explanation that this average is obtained from taking the mean  $\Delta\bar{C}$  value of only samples where linear extension was directly calculated, not by multiplying the site average linear extension by the site average buoyant weight. As such, the sentence has been rewritten as follows: 'The sample mean percent area of macroboring and secondary accretion were multiplied by the associated sample  $\Delta\bar{C}$  (when available) or the overall site average  $\Delta\bar{C}$ , calculated only from samples where direct linear extension calculations were provided.'

- Several values were incorrectly reported in the original version of Table 1. Namely:

Sample	Column	Old value	Corrected value
Deep Flat Basin			
DFB.9	Calcification rate	1.895 ± 0.182	1.895 ± 0.181
DFB.10	Total framework growth rate	1.217 ± 0.127	1.217 ± 0.144
Primary Bank			
PB.10	Average linear extension rate	0.745 ± 0.086	0.749 ± 0.093
	Calcification rate	1.639 ± 0.217	1.647 ± 0.231
	Framework macroboring rate	0.431 ± 0.139	0.433 ± 0.141
	Total framework growth rate	1.208 ± 0.257	1.214 ± 0.271
Average	Framework macroboring rate	0.287 ± 0.039	0.247 ± 0.058
	Framework secondary accretion rate	0.030 ± 0.017	0.007 ± 0.006
	Total framework growth rate	1.552 ± 0.068	1.178 ± 0.026
Secondary Bank			
SB.7	Framework secondary accretion rate	0.04 ± 0.0240	0.040 ± 0.024
	Total framework growth rate	1.310 ± 0.119	1.309 ± 0.119
Average	Framework macroboring rate	0.247 ± 0.058	0.302 ± 0.039
	Framework secondary accretion rate	0.007 ± 0.006	0.026 ± 0.017
	Total framework growth rate	1.178 ± 0.026	1.552 ± 0.068

Please see the corrected Table 1 below and in the updated .pdf online. These edits do not change any statistical analysis conducted in the original paper as the values were entered correctly for analysis.

- In the section 'Results: Mesophotic reef coral growth' on page 52, at the end of the first paragraph the authors provide site average values for  $\Delta\bar{C}$  and  $\Delta\bar{L}\bar{E}$  but actually intended to provide the fastest and slowest rates reported in the study. The sentence now reads as follows: 'The fastest  $\Delta\bar{L}\bar{E}$  and  $\Delta\bar{C}$  rates occurred at the Secondary Bank, the shallowest mesophotic reef site ( $\Delta\bar{L}\bar{E}$ :  $0.979 \pm 0.119 \text{ mm yr}^{-1}$ ;  $\Delta\bar{C}$ :  $1.940 \pm 0.143 \text{ kg m}^{-2} \text{ yr}^{-1}$ ), and the slowest occurred at the Primary Bank ( $\Delta\bar{L}\bar{E}$ :  $0.571 \pm 0.019 \text{ mm yr}^{-1}$ ;  $\Delta\bar{C}$ :  $1.143 \pm 0.040 \text{ kg m}^{-2} \text{ yr}^{-1}$ ). The Deep Flat Basin showed intermediate rates between the Bank sites as evident from the site averages (Table 1).'
- In the following paragraph, in the third sentence, the value '19.4' was corrected to '19.8'.
- The data used to make Fig. 5 had some small mistakes for sample PB.10 in the Primary Bank. As such, please see the corrected version of this figure below and in the updated .pdf online. Note that the original figure nonetheless conveyed the points the authors are making in the text.
- To clarify Fig. 10, the following text has been included in the legend: 'Average framework growth and calcification rates were only calculated from samples where linear extension was measured directly. See Table 1 for reported average framework secondary accretion and macroboring rates.'
- In the last paragraph before the *Acknowledgements*, Macintyre (1988) was cited. After further consideration, the authors feel this paper does not support the point they made in the text and should be removed.

All corrections have been implemented in the .pdf version of this article online.

The authors apologise for any inconvenience these mistakes may have caused and appreciate your understanding.

Table 1. Bulk density, linear extension rates, calcification rates, framework bio-modification rates (macroborring and secondary accretion), and total framework growth rates per sample and site averages. Total framework growth rate was only calculated if the linear extension rate for that sample was measured. *Italic*: site average bulk density or site average linear extension rate was used for calculation; underlined: samples used for isotopic analysis; na: data not available. Average values for each site were obtained by taking the mean from each sample, not by multiplying site average values (like density times linear extension). Values are reported with  $\pm 1$  SE

Sample	Average density (g cm <sup>-3</sup> ) (no. of slices)	Average linear extension rate (mm yr <sup>-1</sup> ) (no. of years)	Calcification rate (kg m <sup>-2</sup> yr <sup>-1</sup> )	Framework macroborring rate (kg m <sup>-2</sup> yr <sup>-1</sup> )	Framework secondary accretion rate (kg m <sup>-2</sup> yr <sup>-1</sup> )	Total framework growth rate (kg m <sup>-2</sup> yr <sup>-1</sup> )
Deep Flat Basin						
DFB.1	na	0.826 $\pm$ 0.066 (7)	<i>1.701 <math>\pm</math> 0.139</i>	0.165 $\pm$ 0.055	0.000 $\pm$ 0.000	<i>1.535 <math>\pm</math> 0.150</i>
DFB.2	2.011 $\pm$ 0.020 (3)	na	na	<i>0.181 <math>\pm</math> 0.062</i>	<i>0.024 <math>\pm</math> 0.018</i>	na
<u>DFB.4</u>	2.106 $\pm$ 0.037 (1 <sup>a</sup> )	0.813 $\pm$ 0.045 (14)	1.711 $\pm$ 0.099	0.157 $\pm$ 0.053	0.000 $\pm$ 0.000	1.554 $\pm$ 0.112
DFB.5	1.899 $\pm$ 0.061 (2)	na	na	<i>0.188 <math>\pm</math> 0.051</i>	<i>0.046 <math>\pm</math> 0.046</i>	na
DFB.6	2.050 $\pm$ 0.008 (3)	0.780 $\pm$ 0.083 (7)	1.599 $\pm$ 0.170	0.364 $\pm$ 0.053	0.104 $\pm$ 0.022	1.340 $\pm$ 0.180
DFB.7	2.016 $\pm$ 0.031 (4)	na	na	<i>0.669 <math>\pm</math> 0.033</i>	<i>0.027 <math>\pm</math> 0.005</i>	na
DFB.8	2.144 $\pm$ 0.072 (3)	na	na	<i>0.657 <math>\pm</math> 0.041</i>	<i>0.015 <math>\pm</math> 0.007</i>	na
DFB.9	2.196 $\pm$ 0.031 (3)	0.863 $\pm$ 0.082 (12)	1.895 $\pm$ 0.181	0.126 $\pm$ 0.018	0.000 $\pm$ 0.000	1.769 $\pm$ 0.182
DFB.10	na	0.730 $\pm$ 0.056 (8)	<i>1.503 <math>\pm</math> 0.118</i>	na	na	<i>1.217 <math>\pm</math> 0.144<sup>b</sup></i>
<b>Average</b>	<b>2.060 <math>\pm</math> 0.037</b>	<b>0.802 <math>\pm</math> 0.022</b>	<b>1.682 <math>\pm</math> 0.065</b>	<b>0.313 <math>\pm</math> 0.080</b>	<b>0.027 <math>\pm</math> 0.012</b>	<b>1.483 <math>\pm</math> 0.095</b>
Primary Bank						
PB.3	2.001 $\pm$ 0.020 (3)	0.571 $\pm$ 0.019 (16)	1.143 $\pm$ 0.040	0.037 $\pm$ 0.003	0.000 $\pm$ 0.000	1.106 $\pm$ 0.040
PB.7	2.104 $\pm$ 0.047 (3)	0.654 $\pm$ 0.039 (9)	1.376 $\pm$ 0.088	0.243 $\pm$ 0.032	0.000 $\pm$ 0.000	1.133 $\pm$ 0.093
<u>PB.9</u>	1.922 $\pm$ 0.040 (3)	0.816 $\pm$ 0.051 (12)	1.568 $\pm$ 0.103	0.387 $\pm$ 0.058	0.005 $\pm$ 0.005	1.186 $\pm$ 0.119
PB.10	2.198 $\pm$ 0.144 (3)	0.749 $\pm$ 0.093 (6)	1.647 $\pm$ 0.231	0.433 $\pm$ 0.141	0.000 $\pm$ 0.000	1.214 $\pm$ 0.271
PB.11	2.128 $\pm$ 0.057 (1 <sup>a</sup> )	na	na	<i>0.131 <math>\pm</math> 0.011</i>	<i>0.043 <math>\pm</math> 0.006</i>	na
PB.12	2.033 $\pm$ 0.048 (2)	0.679 $\pm$ 0.044 (6)	1.380 $\pm$ 0.094	0.129 $\pm$ 0.017	0.000 $\pm$ 0.000	1.251 $\pm$ 0.096
PB.13	2.173 $\pm$ 0.045 (2)	na	na	<i>0.367 <math>\pm</math> 0.060</i>	<i>0.000 <math>\pm</math> 0.000</i>	na
<b>Average</b>	<b>2.080 <math>\pm</math> 0.037</b>	<b>0.694 <math>\pm</math> 0.042</b>	<b>1.423 <math>\pm</math> 0.088</b>	<b>0.247 <math>\pm</math> 0.058</b>	<b>0.007 <math>\pm</math> 0.006</b>	<b>1.178 <math>\pm</math> 0.026</b>
Secondary Bank						
SB.1	2.037 $\pm$ 0.015 (3)	na	na	<i>0.246 <math>\pm</math> 0.028</i>	<i>0.004 <math>\pm</math> 0.004</i>	na
SB.2	1.966 $\pm$ 0.013 (3)	na	na	<i>0.407 <math>\pm</math> 0.019</i>	<i>0.012 <math>\pm</math> 0.012</i>	na
SB.4	2.020 $\pm$ 0.039 (2)	0.960 $\pm$ 0.068 (5)	1.940 $\pm$ 0.143	0.270 $\pm$ 0.062	0.013 $\pm$ 0.013	1.684 $\pm$ 0.157
SB.6	2.096 $\pm$ 0.025 (3)	0.875 $\pm$ 0.037 (13)	1.833 $\pm$ 0.080	0.189 $\pm$ 0.009	0.000 $\pm$ 0.000	1.644 $\pm$ 0.081
<u>SB.7</u>	2.004 $\pm$ 0.031 (4)	0.859 $\pm$ 0.053 (8)	1.722 $\pm$ 0.109	0.453 $\pm$ 0.040	0.040 $\pm$ 0.024	1.309 $\pm$ 0.119
SB.8	2.004 $\pm$ 0.045 (3)	na	na	<i>0.302 <math>\pm</math> 0.016</i>	<i>0.000 <math>\pm</math> 0.000</i>	na
SB.9	1.956 $\pm$ 0.086 (2)	0.833 $\pm$ 0.060 (5)	1.630 $\pm$ 0.137	0.142 $\pm$ 0.031	0.139 $\pm$ 0.140	1.627 $\pm$ 0.198
SB.11	1.945 $\pm$ 0.081 (3)	0.979 $\pm$ 0.119 (5)	1.904 $\pm$ 0.244	0.406 $\pm$ 0.052	0.000 $\pm$ 0.000	1.498 $\pm$ 0.250
<b>Average</b>	<b>2.004 <math>\pm</math> 0.017</b>	<b>0.901 <math>\pm</math> 0.029</b>	<b>1.806 <math>\pm</math> 0.058</b>	<b>0.302 <math>\pm</math> 0.039</b>	<b>0.026 <math>\pm</math> 0.017</b>	<b>1.552 <math>\pm</math> 0.068</b>
<sup>a</sup> Error calculated as the site average SE; <sup>b</sup> Site average framework modification rates used for calculation						

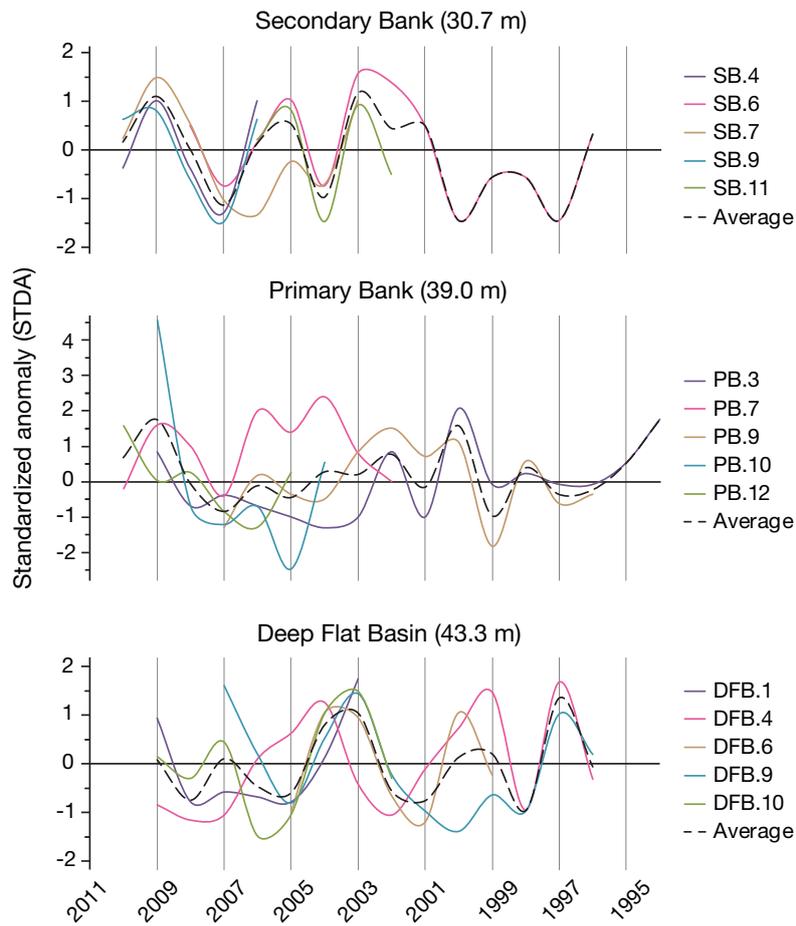


Fig. 5. Standardized anomaly (STDA) in linear extension rate variation with time. Curve colors correspond to specific sample results at a given site. Dotted black lines are overall site averages. STDA is the annual deviation from the mean (yearly average minus average of all years), divided by the standard deviation of all years